







INDEX OF PATENTS

RELATING TO

ELECTRICITY,

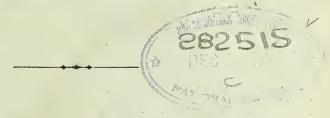
EMBRACING PATENTS ISSUED BY

THE UNITED STATES PATENT OFFICE

FROM JULY 1, 1886, TO JUNE 30, 1887.

APPENDIX No. VI.

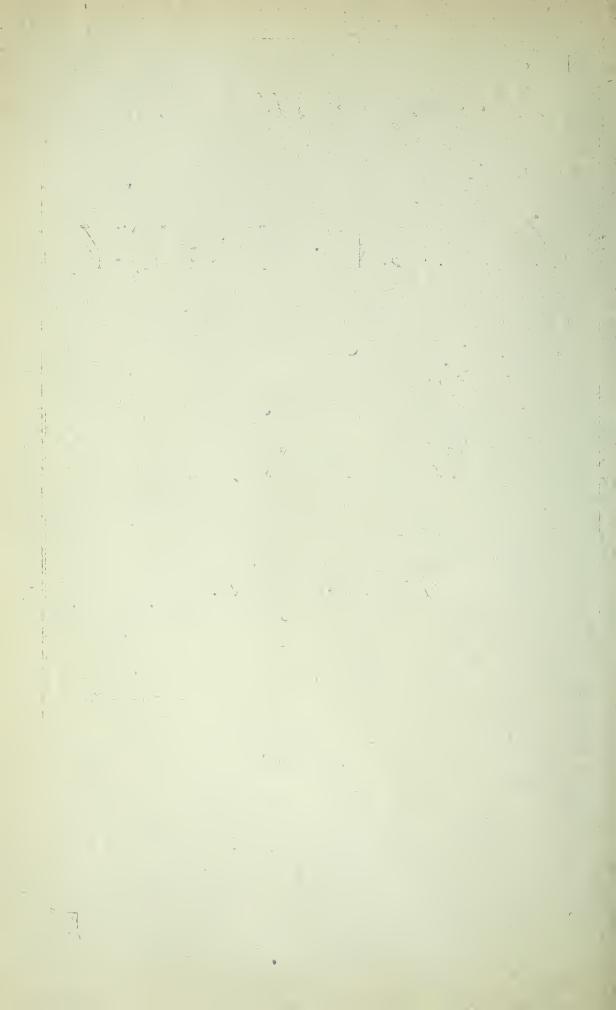
COMPILED UNDER THE DIRECTION OF THE COMMISSIONER OF PATENTS.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1888.







INDEX OF PATENTS

RELATING TO

ELECTRICITY,

EMBRACING PATENTS ISSUED BY

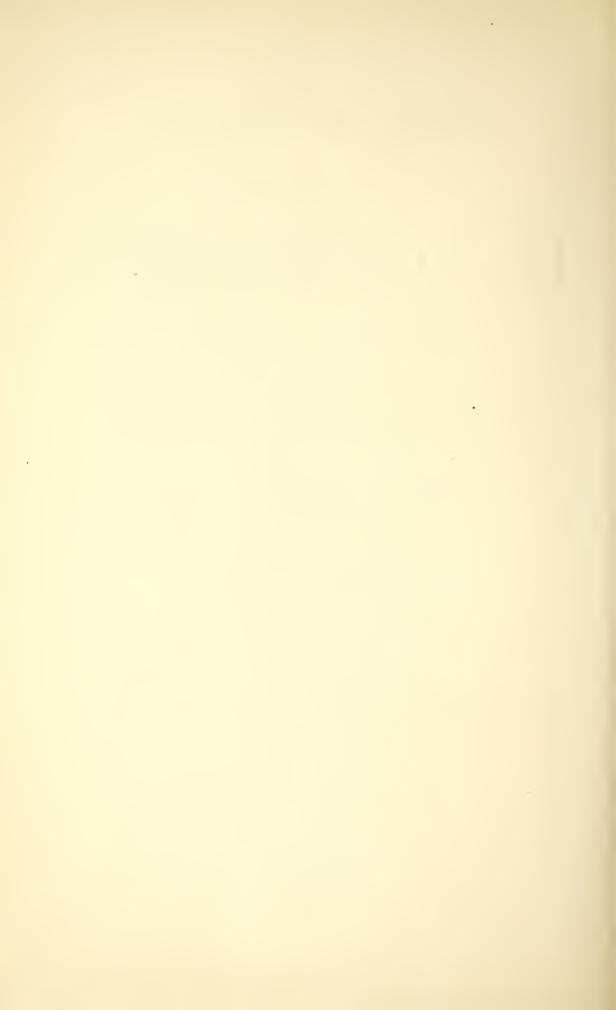
THE UNITED STATES PATENT OFFICE

FROM JULY 1, 1886, TO JUNE 30, 1887.

APPENDIX No. VI.

COMPILED UNDER THE DIRECTION OF THE COMMISSIONER OF PATENTS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1888.



APPENDIX No. VI.

PART I.

CONSISTING OF A

SUB-CLASS INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1, 1886, to June 30, 1887, inclusive, giving names of Inventors, and dates and numbers of Patents in each sub-class in numerical and chronological order.



CLASSIFIED INDEX

OF

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1886, TO JUNE 30, 1887.

171. GENERATION.—6. BATTERIES—GALVANIC.

No.	NAME.	DATE.	No.	NAME.	Date.
344,946 344,947 345,756 346,032 346,032 346,207 346,395 347,259 347,440 347,754 348,901 349,222 349,380 350,296 350,297 350,621 351,602 352,324 352,324 352,486 352,877 353,141 353,757 354,434 355,412 356,261 356,261	De Solomé, G. F. De Solomé, G. F. Wirt, C. Erhard, T. Lugo, O. Le Grande, W. W. Brewer, H. J. Starr, E. T. Partz, A. F. W. Woodward, H. Neyraud, J. B. Goldner, W. C. Jarriant, B. Bazin, E. Piper, C. E. Cox, H. B. Desruelles, L. A. W. Desruelles, L. A. W. Desruelles, L. A. W. Hirlimann, C. J. Hoffman, J. W. Patterson, W. R. Leland, E. J. Kendall, J. A. Partz, A. F. W. O'Keenan, C. E. Quinby, W. C. Pearce, J. E. Perry, N. W.	July 6, 1886 July 20, 1886 July 20, 1886 July 20, 1886 July 27, 1886 July 27, 1886 Aug. 10, 1886 Aug. 17, 1886 Aug. 17, 1886 Aug. 24, 1886 Sept. 7, 1886 Sept. 14, 1886 Sept. 21, 1886 Oct. 5, 1886 Oct. 5, 1886 Oct. 5, 1886 Oct. 12, 1886 Oct. 26, 1886 Nov. 9, 1886 Nov. 9, 1886 Nov. 9, 1886 Nov. 16, 1886 Nov. 23, 1886 Dec. 7, 1886 Dec. 7, 1886 Dec. 14, 1886 Jan. 4, 1887 Jan. 18, 1887 Jan. 25, 1887	357,550 357,642 357,646 358,019 358,030 358,031 358,087 358,314 358,386 358,464 359,055 359,063 359,690 359,835 360,024 360,158 360,532 361,004 361,794 362,531 362,584 363,880 364,656 364,666 364,666 364,666	Chase, S. A.— Tasker, W. H. and Jones T. J.— Upward, A. R. and Pridham, C. W. Curtis, C. G. and Crocker, F. B Frishmuth, W.— Tasker, W. H. and Jones, T. J. Wheeler, S. S. and Curtis, C. G. Crocker, F. B. and Curtis, C. G. Perreur-Lloyd, J. B.— Brewer, H. J.— Desruelles, L. A. W.— Pollak, K. Beattie, J., jr Kookogey, W. P. Jablochkoff, P. Kookogey, W. P. Jablochkoff, P. Kookogey, W. P. Fitch, D. H. Walker, S. F. Partz, A. F. W. Misell, D.— Lugo, O.— Tichenor, A. C.— Bailey, M. and Warner, J.— Hard, J. R.— Francken, V. and Bender, E.— Kookogey, W. P. Meserole, A. V.	Mar. 22, 1887 Mar. 22, 1887 Mar. 29, 1887 Mar. 29, 1887 Apr. 5, 1887 Apr. 12, 1887 Apr. 26, 1887 May 10, 1887 May 10, 1887 May 10, 1887 May 24, 1887 May 24, 1887 May 31, 1887 June 7, 1887 June 14, 1887 June 14, 1887 June 14, 1887
356,796	Slattery, M. M. M.		365,359	Germain, P	June 21, 1887
	171. GEN	ERATION.—72.	BATTERI	ES—SECONDARY.	
344,882 344,957 345,511 347,023 347,231 347,258 347,300 348,452 348,625 352,708 353,248 353,511 354,272	Trippe, S. L Farbaky, S. and Schenek, S De Virloy, A. L., Commelin, E. and Bailhache, G. Khotinsky, A. Berliner, E De Khotinsky, A. Starr, E. T. Julien, E Trippe, S. L Farbaky, S. and Schenek, S Moses, O. A. Buell, C. E Sorley, C Thomson, E	July 6, 1886 July 6, 1886 July 6, 1886 July 13, 1886 Aug. 10, 1886 Aug. 10, 1886 Aug. 10, 1886 Aug. 31, 1886 Sept. 7, 1886 Nov. 16, 1886 Nov. 23, 1886 Nov. 23, 1886 Dec. 14, 1886	354,352 356,390 358,092 358,111 358,120 358,341 359,072 359,248 359,876 359,877 359,934 360,375 362,639 362,640	Sass, V. and Friederich, K.— Barral de Montaud, C.— Van Gestel, J. T.— Fitz-Gerald, D. G.— Jones, T. J.— Elieson, C. P.— Griscom, W. W.— Farbaky, S. and Schenek, S.— Meserole, A. V. Main, W.— Conant, T. P.— Ludlow, W. I.—— Ludlow, W. I.——————————————————————————————————	Jan. 18, 1887 Feb. 22, 1887 Feb. 22, 1887 Feb. 22, 1887 Feb. 22, 1887 Mar. 8, 1887 Mar. 15, 1887 Mar. 22, 1887

171. GENERATION.—74. BATTERIES—SECONDARY—APPLICATIONS.

No.	NAME.	DATE.	No.	NAME.	DATE.
0.15.500	D. H. C. E.	A 01 1000	977 979	C. E.T.	E 1 15 1007
347,768	Buell, C. E		357,873	Starr, E. T	Feb. 15, 1887
353,142	Knowles, E. R Marshall, J. H		359,900 359,901	Starr, E. T	Mar. 22, 1887
353,797				Starr, E. T	Mar. 22, 1887
357,627	Prescott, G. B., jr	Feb. 15, 1887	365,460	Buen, C. E	June 28, 1887
	171. G	ENERATION	—95. GAL	VANOMETERS.	
345,755	Wirt, C	July 20, 1886	356,042	Howell, J. W	Jan. 11, 1887
351,388	Mather, R. H	Oct. 26, 1886	359,619	Macrae, R	Mar. 22, 1887
353,649	Waddell, M	Nov. 30, 1886	362,451	Lange, P	May 3, 1887
353,915	Bradley, C. S.	Dec. 7, 1886	363,333	Hammer, W. J	May 17, 1887
356,041	Howell, J. W	Jan. 11, 1887	,	,	,
	171. G	ENERATION	-27. Indu	uction-Coils.	
		T. 1. 0. 4000	051051		~
344,818	Drawbaugh, D.	July 6, 1886	354,274	Thomson, E	Dec. 14, 1886
346,528	Beattie, J., jr	Aug. 3, 1886	358,415	Slattery, M. M. M	Feb. 22, 1887
348,465	Hard, J. R.	Aug. 31, 1886	358,793	Slattery, M. M. M.	Mar. 1, 1887
349,611	Stanley, W., jr.	Sept. 21, 1886	360,198	Bláthy, O. T	Mar. 29, 1887
349,612	Stanley, W., jr	Sept. 21, 1886	360,934	Waite, H. E	Apr. 12, 1887
349,616	Stanley, W., jr	Sept. 21, 1886	361,587	Gross, M. H	Apr. 19, 1887
349,617	Stanley, W., jr	Sept. 21, 1886 Oct. 19, 1886	363,304 363,851	Stanley, L. T	May 17, 1887
351,077 352,084	Stögermayr, F. F.	Nov. 2, 1886	365,116	Ritchie, J	May 31, 1887
		Nov. 2, 1886	505,110	Dominanii, Li	June 21, 1887
352,105	Zipernowsky, K., Déri, M. and Bláthy, O. T.	Nov. 2, 1000			
	171. GE	NERATION.—	33. Magn	ETO-ELECTRIC.	
345,336	Thomson, E	July 13, 1886	354,538	Curtis, C. G. and Crocker, F. B.	Dec. 21, 1886
346,965	Warner, E. P	Ang. 10, 1886	354,539	Curtis, C. G. and Wheeler, S. S.	Dec. 21, 1886
348,883	Bossard, A	Sept. 7, 1886	354,588	Wheeler, S. S. and Curtis, C. G.	Dec. 21, 1886
349,392	Hansell, W	Sept. 21, 1886	354,791	Irwin, J. H	Dec. 21, 1886
349,615	Stanley, W. jr	Sept. 21, 1886	354,945	Sperry, E. A	Dec. 28, 1886
349,716	Higham, E. T. and D	Sept. 28, 1886	354,946	Sperry, E. A	Dec. 28, 1886
349,912	Thomson, E	Sept. 28, 1886	355,738	Williamson, D	Jan. 11, 1887
350,000	Jenkins, J		356,667	Short, S. H	Jan. 25, 1887
350,003	Kennedy, R		356,902	Thomson, E	Feb. 1, 1887
350,154	Radford, B. F		357,295	Westinghouse, G., jr., and	Feb. 8, 1887
351,148	Adams, T. E		0.55 505	Schmid, A.	77.1 17 1005
351,167	Diehl, P		357,705	Easton, J. W	Feb. 15, 1887
351,544	Walter, H. E.		358,340	Eickemeyer, R	Feb. 22, 1887
351,902	Eickemeyer, R Eickemeyer, R		$\frac{10,816}{559,748}$	Snowberger, J(Reis.) Tesla, N	Mar. 8, 1887 Mar. 22, 1887
351,903 351,904	Eickemeyer, R		359,894	Sheehy, R. J	Mar. 22, 1887
351,906	Eickemeyer, R	Nov. 2, 1886	360,030	Leipner, W. A.	Mar. 29, 1887
351,907	Eickemeyer, R		360,258	Walter, II. E. and Batchelor, C	Mar. 29, 1887
352,074	Van Depoele, C. J	Nov. 2 1886	360,259	Walter, H. E. and Batchelor, C	
352,234	Eickemeyer, R		361,273	Easton, J. W	Apr. 19, 1887
353,035	Howell, J. W.		361,770	Main, W	Apr. 26, 1887
353,151	Mather, R. H		361,896	Schmid, A	Apr. 26, 1887
353,164	Schmid, A		361,973	Warner, E. P	Apr. 26, 1887
353,310	Keith, N. S		363,126	Easton, J. W	May 17, 1887
353,414	Coerper, C		363,127	Easton, J. W	
353,989	Sperry, E. A	Dec. 7, 1886	363,128	Easton, J. W	May 17, 1887
354,292	Williamson, D.	Dec. 14, 1886	363,129	Easton, J. W	May 17, 1887
	171. GENERATI	ON.—76. MAGN	ето-Е сес	TRIC—IIAND-MACHINES.	
353,827	Smith, H. J	Dec. 7, 1886	361,737	Wilkins, G. A	Apr. 26, 1887
	Cincili, II. O	1, 1000	001,707	Trikins, G. II	Tipi. 20, 1007
	17	1. GENERATI	ON.—34.	METERS.	
346,957	Stevens, W. L		355,871	Gordon, J. E. H	
348,648	Weston, E	Sept. 7, 1886	362,322	Sheehy, R. J	May 3, 1887
			•		

171. GENERATION.—40. REGULATORS.

171. GENERATION.—40. REGULATORS,						
No.	NAME.	Date.	No.	NAME.	DATE.	
347,204 347,937 347,964 348,385 348,876 350,676 350,754 351,351 351,699 351,961 353,179 353,180 353,367 353,986 353,988	Short, S. H	Aug. 31, 1886 Sept. 7, 1886 Oct. 12, 1886 Oct. 12, 1886 Oct. 19, 1886 Oct. 26, 1886 Oct. 26, 1886 Nov. 23, 1886 Nov. 23, 1886 Nov. 30, 1886	353,990 354,273 354,606 355,729 357,115 357,293 358,133 358,493 359,101 359,770 361,116 361,712 362,510 363,184 365,465	Sperry, E. A. Thomson, E. Mather, R. H. Stevens, W. L. Buckingham, C. L. Shallenberger, O. B. Vivó y Grælls, F. Slattery, M. M. M. Shallenberger, O. B. Buckingham, C. L. McLaughlin, J. F. Baxter, W., jr. Perkins, C. G. Higham, E. T. and D. Thomson, E. Edison, T. A.		
	171. GENE	RATION.—97.	Systems	of Distribution.		
345,212 347,642 350,482 351,589 352,691	Byllesby, H. M	Aug. 17, 1886 Oct. 12, 1886 Oct. 26, 1886	354,783 358,346 360,122 360,125	Gordon, J. E. H	Dec. 21, 1886 Feb. 22, 1887 Mar. 29, 1887 Mar. 29, 1887	
	172. N	IOTIVE POWI	ER.—9. C.	AR BRAKES.		
345,700 347,075 347,904 348,360 348,636 349,738 351,650 352,167 353,880 356,964	Kinsman, F. E Timmis, I. A. and Forbes, G Van Depoele, C. J Van Depoele, C. J Park, H. S Park, H. S Park, H. S Van Depoele, C. J Park, H. S Ries, E. E Ries, E. E	Aug. 24, 1886 Aug. 31, 1886 Sept. 7, 1886 Sept. 28, 1886 Oct. 26, 1886 Nov. 9, 1886 Dec. 7, 1886 Feb. 1, 1887	357,576 357,760 357,976 358,866 359,593 360,060 360,179 361,089 361,090 363,463 363,464	Card, G. F Card, G. F Card, G. F Massey, A. P Carpenter, J. F Sperry, E. A Solano, R Selden, C Selden, C Hollerith, H Hollerith, H	Feb. 15, 1887 Feb. 15, 1887 Feb. 15, 1887 Mar. 8, 1887 Mar. 22, 1887 Mar. 29, 1887 Mar. 29, 1887 Apr. 12, 1887 Apr. 12, 1887 May 24, 1887 May 24, 1887	
	172. MOTI	VE POWER.—	15. Denta	AL INSTRUMENTS.		
362,310	Parsons, H. W				May 3, 1887	
-	172. M	OTIVE POWE	ER.—75. I	OCOMOTION,		
344,962 345,845 345,884 346,465 346,724 346,902 347,901 347,901 347,905 348,008 348,477 348,792 348,880 352,265 353,086 353,335	Harris, R. L Henry, J. C Chinnock, C. E Chandler, T. P., jr Chandler, T. P., jr Edgar, E. F Van Depoele, C. J Finney, J. R Van Depoele, C. J Harris, R. L Short, S. H. and Nesmith, J. W Short, S. H. and Nesmith, J. W Smith, M. H Averell, W. W Ries, E. E Shaw, E. S Van Depoele, C. J	July 20, 1886 July 20, 1886 Aug. 3, 1886 Aug. 3, 1886 Aug. 10, 1886 Aug. 10, 1886 Aug. 10, 1886 Aug. 24, 1886 Aug. 24, 1886 Aug. 24, 1886 Aug. 31, 1886 Aug. 31, 1886 Sept. 7, 1886 Sept. 7, 1886 Nov. 9, 1886 Nov. 23, 1886	353,829 354,350 354,793 356,579 357,516 358,043 358,512 358,609 359,050 359,540 359,607 361,676 362,323 363,250 365,340 365,341	Sprague, F. J. Samuel, E. Knight, W. H. Erhardt, H. Atwater, J. B. Knight, W. H. Van Depoele, C. J. Harris, R. L. Bentley, E. M. McLaughlin, J. F. Heysinger, I W. Daît, I. Short, S. H. and Nesmith, J. W. McElroy, W. J. and Nicholson, J. D. Hamilton, B. F. Hamilton, B. F.	Dec. 14, 1886 Dec. 21, 1886 Jan. 25, 1887 Feb. 8, 1887 Feb. 22, 1887 Mar. 1, 1887 Mar. 1, 1887 Mar. 15, 1887 Mar. 22, 1887 Mar. 22, 1887 Apr. 26, 1887 May 3, 1887 May 17, 1887 June 21, 1887 June 21, 1887 June 21, 1887	

172. MOTIVE POWER.—36. Motors.

No.	NAME.	Date.	No.	Name.	DATE.
345,334 345,720 346,527 347,902 347,903 349,563 349,654 349,715 353,003 350,025 350,668 350,728 351,229 353,987 354,111 355,024 355,771 356,576	Thomson, E	Oct. 19, 1886 Dec. 7, 1886 Dec. 14, 1886 Dec. 28, 1886 Jan. 11, 1887	356,834 356,878 357,374 358,682 358,753 359,429 360,216 361,115 361,117 361,274 361,829 362,798 363,185 363,186 363,466 363,466 363,669 364,086	Griscom, W. W Houston, E. J Darling, W. H. and Boek, L., jr Long, M. W Rogers, J. H Clark, E. P Fisher, F. E Baxter, W., jr Baxter, W., jr Bastou, J. W Marvin, H. N Van Depoele, C. J Thomson, E Thomson, E Hunter, R. M Paine, H. M Card, G. F	Feb. 1, 1887 Feb. 1, 1887 Feb. 1, 1887 Mar. 1, 1887 Mar. 1, 1887 Mar. 15, 1887 Mar. 12, 1887 Apr. 12, 1887 Apr. 12, 1887 Apr. 19, 1887 Apr. 26, 1887 Apr. 26, 1887 May 10, 1887 May 17, 1887 May 17, 1887 May 24, 1887 May 24, 1887 May 24, 1887 May 31, 1887
	172. MOTIV	E POWER.—8.	STEERING	AND PROPULSION.	
352,374	Tilden, J. A	Nov. 9, 1886	359,313	Bennett, H. M.	Mar. 15, 1887
	172. MOTIV	E POWER.—8	3. Transı	dission of Power.	
361,843	Sperry, E. A				Apr. 26, 1887
	173.	CONDUCTORS	S.—13. Co	NDUCTORS.	
10,846 344,823 346,414 346,433 346,645 348,822 348,994 349,893 351,191 351,192 351,611 352,445 352,852 353,653 354,320 355,491 355,492	Williams, J. B	July 6, 1886 July 27, 1886 July 27, 1886 Aug. 3, 1886 Sept. 7, 1886 Sept. 14, 1886 Oct. 19, 1886 Oct. 19, 1886 Oct. 26, 1886 Nov. 9, 1886 Nov. 16, 1886 Nov. 30, 1886 Dec. 14, 1886 Jan. 4, 1887	355,493 355,753 356,156 356,207 358,140 359,726 359,825 360,567 360,925 361,217 361,705 361,705 361,731 362,076 362,108 362,376 362,872 364,994	Wiley, G. L.— Bardonnaut, P. E.— Patterson, W. R.— Patterson, W. R.— Barrett, J. A.— Johnson, E. H.— Thompson, C. M.— Dunham, T. H.— Solano, R.— Flad, H.— Clokey, J. M.— Litchfield, I. W.— Stewart, S. B.— Gilson, S. H.— Perkins, C. G.— Gould, C. C. and Smith, W.— Brooks, D.— Degenhardt, F. E.—	Jan. 18, 1887 Feb. 22, 1887 Mar. 22, 1887 Mar. 22, 1887 Apr. 5, 1887 Apr. 12, 1887 Apr. 12, 1887 Apr. 19, 1887 Apr. 26, 1887 Apr. 26, 1887 May 3, 1887 May 3, 1887 May 3, 1887
	173. CONDU	CTORS.—94. C	ONDUCTOR	s-Lead-Covered.	
345,956 355,843 355,844 356,206	Eaton, A. K.——————————————————————————————————	Jan. 11, 1887 Jan. 11, 1887 Jan. 18, 1887	363,182 364,177 364,178	Tatham, J Kitson, G. L Kitsou, G. L	May 17, 1887 May 31, 1887 May 31, 1887
	173. CONDU	CTORS.—70. C	ONDUCTOR	s-Underground.	
344,827 344,843 346,250 346,688 346,840 346,942 348,572 349,472	Grant, J Macdonald, R Wheaton, F Robinson, W. L Campbell, E Patterson, W. R Munsie, J. F Anderson, J. C	July 6, 1886 July 27, 1886 Aug. 3, 1886 Aug. 3, 1886 Aug. 10, 1886 Sept. 7, 1886	349,739 349,797 350,515 351,193 351,697 351,913 352,504 352,754	Perkins, C. G. Jagel, J. M. Williams, B. McCracken, E. D. Greene, F. V. Haddock, W. Butler, J. W. Hurlbut, S. E.	Sept. 28, 1886 Oct. 12, 1886 Oct. 19, 1886 Oct. 26, 1886 Nov. 2, 1886 Nov. 9, 1886

173. CONDUCTORS.—70. CONDUCTORS—UNDERGROUND.—Continued.

	175. CONDUCTOR	is.—70. CONDUC	TORS—UN	DERGROUND.—Continued.	
No.	NAME.	DATE.	No.	NAME.	DATE.
352,771 354,290 354,892 355,063 355,798 355,867 356,151 356,152 356,153 356,981	Morehouse, H. G Williams, B Du Bois, J. S Crocker, F. B Locke, S. D Sutton, G. D Denison, R. A Munsie, J. F Munsie, J. F Brooks, D	Dec. 14, 1886 Dec. 28, 1886 Dec. 28, 1886 Jan. 4, 1887 Jan. 11, 1887 Jan. 18, 1887 Jan. 18, 1887 Jan. 18, 1887	358,095 358,778 359,738 359,816 360,316 360,655 361,086 361,276 361,319 361,347	Williams, B.————————————————————————————————————	Mar. 1, 1887 Mar. 22, 1887 Mar. 22, 1887 Mar. 29, 1887 Apr. 5, 1887 Apr. 12, 1887 Apr. 19, 1887 Apr. 19, 1887
	173.	CONDUCTORS	S.—14. Co	NNECTORS.	
346,423 347,625 349,397 349,398 349,809 350,293 350,293 350,829 353,984 355,380	Burton, G. D	Oct. 5, 1886 Oct. 12, 1886 Dec. 7, 1886	355,423 355,611 357,165 358,518 358,592 359,982 360,672 364,558 364,559	Watkins, F. C. Howson, H.— Capers, J. S.— Westinghouse, G., jr— Clarke, C. L.— Plume, F. C.— Fertig, O. S. Wamsley, W. F. and McIntosh, T. Wamsley, W. F.—	Jan. 4, 1887 Feb. 1, 1887 Mar. 1, 1887 Mar. 1, 1887 Mar. 22, 1887 Apr. 5, 1887 June 7, 1887
	173.	CONDUCTOR	S.—28. In	SULATORS.	
346,475 346,971 346,972 347,454 347,635 347,943 349,022 349,788 350,365	Hawken, T. Wilson, J. Wilson, J. O'Brien, J. Leonardson, J. M. Wilson, J. Fitch, N. T. Holdsworth, J. W.	Aug. 10, 1886 Aug. 10, 1886 Aug. 17, 1886 Aug. 17, 1886 Aug. 24, 1886 Sept. 14, 1886 Sept. 28, 1886	350,843 352,436 352,437 353,120 355,165 359,812 360,354 362,682	Rogers, C	Nov. 9, 1886 Nov. 9, 1886 Nov. 23, 1886 Dec. 28, 1886
	. 173. C	ONDUCTORS	–31. Lісн	ITNING-Rods.	
351,813 354,342 355,655 356,531 357,050 359,940	Stites, G Pratt, C. C Munson, A. J Grimes, C. H Vail, J. H Patee, T. H. and Lawshe, S. R	Dec. 14, 1886 Jan. 4, 1887 Jan. 25, 1887 Feb. 1, 1887	361,520 362,062 362,064 362,801 364,605	Hill, C. F———————————————————————————————————	May 3, 1887 May 3, 1887 May 10, 1887
	- 173	. CONDUCTOR	S.—43. R	HEOSTATS.	
347,120 347,766	Mather, R. H Brown, H. P. and F. H	Aug. 10, 1886 Aug. 24, 1886	354,257 362,859	Slattery, M. M. M. Stearns, J. M., jr	Dec. 14, 1886 May 10, 1887
	173. CC	ONDUCTORS.—	-86. Tele	GRAPH-POLES.	
347,602 356,403	Herron, H. C.	Aug. 17, 1886 Jan. 18, 1887	359,622	Murray, W	Mar. 22, 1887
	174. ME	DICAL AND S	SURGICA	L.—87. Baths.	
360,773	Hosford, E				Apr. 5, 1887

174. MEDICAL AND SURGICAL.—88. BODY-WEAR.

No.	NAME.	Date.	No.	NAME.	DATE.
345,025 345,178 346,215 347,592 348,406 349,849 351,233	Blodgett, F. M Rockwell, R. N Murray, J. H Gray, I McGrady, J. and Sloane, G. H_ Kugler, G Watkins, H. W	July 6, 1886	353,346 355,059 357,647 360,127 363,886 364,975	Baldwin, C. E Charles, J Vander Weyde, P. H Wallis, F. B Dunlap, W. W Townley, L. P. and Washburn, W. J.	Nov. 30, 1886 Dec. 28, 1886 Feb. 15, 1887 Mar. 29, 1887 May 31, 1887 June 14, 1887
	174. MEDI	CAL AND SUI	RGICAL.	-89. Electrodes.	
359,506	Goodwillie, D. H	Mar. 15, 1887	360,429	Goodwillie, D. H	Apr. 5, 1887
	175. SPECIAL A	APPLICATION	S.—4. Ap	PLICATIONS—GENERAL.	
345,452 345,838 346,237 347,013 348,606 353,403 353,566 354,838 354,853 355,002 358,053	Roth, C. W Giles, C. K. and Fenner, R. E. Smith, R. T Scola, J. P. A Worth, A. B Deckard, L. L Lackersteen, M. H Michales, M. A. and Michaels, A Cabell, S. G Trauernicht, T. H Michales, M. A. and Michaels, A	Sept. 7, 1886 Nov. 30, 1886 Nov. 30, 1886 Dec. 21, 1886 Dec. 21, 1886 Feb. 15, 1887	358,116 359,352 359,902 360,517 360,647 361,248 361,249 362,133 363,550 363,593 364,372	Gustin, A. J Gardner. E. V. Steffens, M. J Emley, J. E Bennett, J. B. and Samuels, F. W. Winton, H. D. Worms, E. and Balé, J Whitney, E. R. Sedgwick, F. Clamer, F. J. Rae, J. H	Feb. 22, 1887 Mar. 15, 1887 Mar. 22, 1887 Apr. 5, 1887 Apr. 12, 1887 Apr. 12, 1887 Apr. 12, 1887 May 3, 1887 May 24, 1887 May 24, 1887 June 7, 1887
	175. SPECIAL APPLI	CATIONS.—5.	A pplicat	Tions—Tools and Machines.	
10,838 345,596 345,998 347,656 348,562 350,200 351,314 352,070 352,796 353,123 354,881 356,496 356,940 357,193 358,810 358,924	Curtiss, R. M	July 13, 1886 July 20, 1886 Aug. 17, 1886 Oct. 5, 1886 Oct. 19, 1886 Nov. 2, 1886 Nov. 16, 1886 Nov. 23, 1886 Dec. 28, 1886 Jan. 25, 1887 Feb. 1, 1887 Mar. 1, 1887	359,303 359,414 359,552 359,752 360,405 361,778 361,779 362,053 362,751 363,592 364,353 365,018 365,216 365,604	Westinghouse, G., jr Wasserman, G Bassett, N. C Wetmore, J. A Bain, F Reynolds, G. H Reynolds, G. H Ball, C. E Lagerman, A Crawford, C Kampfe, R Otis, C. G Winckler, E. and Heilmann, J. J Ketchum, O. W	Mar. 15, 1887 Mar. 15, 1887 Mar. 15, 1887 Mar. 22, 1887 Apr. 5, 1887 Apr. 26, 1887 Apr. 26, 1887 Apr. 26, 1887 May 3, 1887 May 10, 1887 May 24, 1887 June 7, 1887 June 14, 1887 June 28, 1887
	175. SPECI	AL APPLICAT	TIONS.—2	20. Electrolysis.	
356,640 357,659 359,165 360,852	Hickley, A. S Fitz Gerald, D. G Mathieu, J. A Cassel, H. R	Feb. 15, 1887 Mar. 8, 1887	360,853 362,022 362,441	Cassel, H. R.——————————————————————————————————	Apr. 12, 1887 Apr. 26, 1887 May 3, 1887
	175. SPECIAI	L APPLICATIO	ONS.—21.	ELECTRO-MAGNETS.	
350,957 351,256	Thomson, E Farmer, M. G	Oct. 19, 1886	358,343 362,135	Gaiser, C. A	Feb. 22, 1887 May 3, 1887
	175. SPECIAL APPLICAT	IONS.—96, ELI	ECTRO-MA	GNETS-MACHINES FOR WINDIN	G.
350,828 359,205	Jones, L. B Curtis, C. G., Wheeler, S. S., and Crocker, F. B.	Oct. 12, 1886 Mar. 8, 1887	363,106	Wynne, F	May 17, 1887

175. SPECIAL APPLICATIONS.—16. HEATERS.

No.	NAME.	Date.	No.	NAME.	DATE.
347,140	Thomson, E	Ang 10 1886	357,572	Burton, W. L	Feb. 15, 1887
347,141	Thomson, E	Aug. 10, 1886	360,144	Cowles, E. H. and A. H	Mar. 29, 1887
347,142	Thomson, E	Aug. 10, 1886	363,320	Benardos, N. de and Olszewski, S	
350,445	Potter, E. B		'		
	175. SPECIA	L APPLICATI	ONS.—92	. Igniting Devices.	
346,533	Crockett, C. H. and Allen, C. C-	Aug. 3, 1886	360,696	Holtzer, C. W	Apr. 5, 1887
349,533	Smith, A. T	Sept. 21, 1886	364,235	Fisher, I	June 7, 1887
352,473	Lüngen, A	Nov. 9, 1886	364,760	Holtzer, C. W	June 14, 1887
359,053	Bosworth, C. B	Mar. 8, 1887			
	175. SPECI	AL APPLICA	rions.—	25. Incrustation.	
354,637	Hart, G. W				Dec. 21, 1886
					,
	175. SPECIAL A	PPLICATIONS	S.—93. MA	AGNETIC LOCKS AND BOLTS.	
347,029	Fisher, W. C	Aug. 10, 1886	351,600	Henzel, C. and Wood, W	Oct. 26, 1886
347,068	Sedgwick, F		352,154	Rousseau, D	Nov. 9, 1886
347,069	Sedgwick, F	Aug. 10, 1886	353,263	Lüngen, A	Nov. 23, 1886
347,070	Sedgwick, F	Aug. 10, 1886	358,417	Summers, L. P	Feb. 22, 1887
347,071	Sedgwick, F	Aug. 10, 1886	358,975	Henzel, G. L	Mar. 8, 1887
350,312	Marklaod, W. H	Oct. 5, 1886	363,623	Flowers, M. I	May 24, 1887
	175. SPEC	IAL APPLICA	TIONS.—	-90. Separators.	
345,383	Kessler, H. P. J	July 13, 1886	354,923	Mindeleff, D	Dec. 28, 1886
348,121	Gilbert, G. A	Aug. 24, 1886	358,961	Convers, A. E	Mar. 8, 1887
348,771	Payne, C. Q	Sept. 7, 1886	359,085	Mansfield, G. W	Mar. 8, 1887
349,422	Bartlett, C. O	Sept. 21, 1886	360,842	Atkins, C. H	Apr. 12, 1887
350,945	Roth, C. W	Oct. 19, 1886			
	175. SPECIA	L APPLICATI	ONS.—86.	Telegraph-Poles.	
349,049	Lippincott, J. E				Sept. 14, 1886
	175. SPECIAL	APPLICATIO	NS.—84.	VALVE-CONTROLLERS.	
346,505	Sears, J. W	Aug. 3, 1886	358,520	Westinghouse, G., jr	Mar. 1, 1887
347,589	Ghegan, J. J	Aug. 17, 1886	358,521	Westinghouse, G., jr	Mar. 1, 1887
347,707	Grovesteen, M. W.	Aug. 17, 1886	358,691	Page, R. C. and Soden, F. II	Mar. 1, 1887
349,109	Lenaerts, L. G		358,713	Westinghouse, G., jr.	Mar. 1, 1887 Mar. 22, 1887
351,419 352,044	Cox, H. B.	Nov 2 1886	359,673 363,079	Grovesteen, M. W Pease, W. M	May 17, 1887
357,055	Weil, L	Feb. 1, 1887	365,040	Bassett, G. B	June 21, 1887
357,056	Weil, L	Feb. 1, 1887	,	,	,
	176. ELECTRIC I	IGHTING.—80). Cuts-Ot	UTS-ELECTRO-MAGNETIC.	
950 510	WII I G	0-1 10 1000	950,000	D' A E	T 11 1007
350,519 350,955	Woolley, L. G Thomson, E		356,008 360,123	Paige, A. E Thomson, E	Jan. 11, 1887 Mar. 29, 1887
352,035	Brown, H. P	Nov. 2, 1886	360,123	Thomson, E	Mar. 29, 1887
353,334	Van Depoele, C. J	Nov. 30, 1886	361,844	Sperry, E. A	Apr. 26, 1887
355,739	Wilmarth, F. H	Jan. 11, 1887	,		• /
	176. ELECTRIC	C LIGHTING	-79. Cut-	Outs—Mechanical.	
348,455	Fairchild, J. M	Aug. 31, 1886	356,038	Gould, C. C	Jan. 11, 1887
348,456	Fairchild, J. M. and O'Connor, J		356,632	Fuchs. J	Jan. 25, 1887
353,603	Stanley, W., jr			Fuchs, J Swan, A	May 3, 1887
			,		

176. ELECTRIC LIGHTING.—79. CUT-OUTS—MECHANICAL.—Continued.

Name.	DATE.	No.	Name.	DATE.
Thomson, E	May 17, 1887 May 17, 1887 June 21, 1887	365,189 365,585	Lemp, H. and Wightman, M. J. Davis, D., jr	June 21, 1887 June 28, 1887
176. ELECTF	IC LIGHTING	3.—78. Cu	T-OUTS-THERMAL.	
Perkins, C. G.——————————————————————————————————	Aug. 24, 1886 Aug. 31, 1886 Sept. 7, 1886 Oct. 12, 1886 Nov. 9, 1886 Nov. 16, 1886 Nov. 16, 1886	354,466 354,847 356,199 360,570 361,713 364,721	Eschwei, C	Dec. 14, 1886 Dec. 21, 1886 Jan. 18, 1887 Apr. 5, 1887 Apr. 26, 1887 June 14, 1887
176. ELE	CTRIC LIGHT	TNG.—17	. Lights—Arc.	
Waterhouse, A. G	July 20, 1886 July 27, 1886 July 27, 1886 Aug. 3, 1886 Aug. 10, 1886 Sept. 7, 1886 Sept. 7, 1886 Sept. 14, 1886 Sept. 14, 1886 Sept. 14, 1886 Sept. 14, 1886 Sept. 14, 1886	349,999 350,956 350,975 351,601 351,973 353,305 354,639 355,129 356,788 356,903 357,774 365,553	Jeffery, G Thomson, E Cutten, E. B Hill, W. S Gifford, A. T Heńneberg, H. and Lorenz, R. O Jenney, C. D Brady, J Pyle, H. L Thomson, E Klán, V. and Spurny, F Thomson, E	Sept. 28, 1886 Oct. 19, 1886 Oct. 19, 1886 Oct. 26, 1886 Nov. 2, 1886 Nov. 30, 1886 Dec. 21, 1886 Dec. 28, 1886 Feb. 1, 1887 Feb. 1, 1887 June 28, 1887
176. ELECTRIC LIGHT	ING.—103. Lie	энтs—Акс	c, Gravity Feed, Frictional.	
Pyle, G. C. Jones, R. F	Nov. 30, 1886 Dec. 28, 1886	356,211 359,221	Scribner, C. E McDill, H. C. and Gaston, J. E_	Jan. 18, 1887 Mar. 8, 1887
176. ELECTRIC LIG	HTING.—104.	Lights—.	Arc, Gravity Feed, Gear.	
Boissier, H. R. Crowdus, W. A. and Sutton, H. M. Hanson, L. Tregoning, J	Dec. 21, 1886 Feb. 22, 1887 Mar. 29, 1887 Mar. 29, 1887	360,377 360,662 361,663 362,289	Crowdus, W. A. and Sutton, H. M. Cooke, C. F. Wiese, G. A. Lakin, J. A	Mar. 29, 1887 Apr. 5, 1887 Apr. 19, 1887 May 3, 1887
176, ELECTRIC	LIGHTING.—1	05. Light	S—Arc, Positive Feed.	
Harding, A	Jan. 18, 1887	362,312 362,852 363,611	Pieper, H., fils Noble, C. M Denison, J. F	May 3, 1887 May 10, 1887 May 24, 1887
176. ELECTRIC LIC	HTING.—102.	LIGHTS-	FILAMENTS AND CARBONS.	
Pfannkuche, A Reinmann, A. L Ball, C. M De Lodyguine, A Lister, J. T Dick, R Shaw, E	July 13, 1886 July 20, 1886 July 27, 1886 Aug. 10, 1886 Aug. 10, 1886 Sept. 21, 1886 Nov. 30, 1886	354,310 356,020 356,879 363,909 364,031 365,509	Edison, T. A Voelker, W. L Lister, J. T Pauthonier, C Maxwell, W Edison, T. A	Dec. 14, 1886 Jan. 11, 1887 Feb. 1, 1887 May 31, 1887 May 31, 1887 June 28, 1887
	Thomson, E—Hammer, W. J—Wightman, M. J. and Lemp, H—Wightman, M. J. and Lemp, H—Wightman, M. J. and Brown, W. T. Whitney, E. R. Mingle, G. W. and Brown, W. T. Lemp, H. and Wightman, M. J. Lemp, H. and Wightman, M. J. Lemp, H. and Wightman, M. J. Lemp, H. and F. W. Milliamson, D. Bronson, L. G. Thone, F—Pfannkuche, G—Heymann, E. and F. W—Heymann, E. and F. W—Heymann, E. and F. W—Keilholtz, P. O—Keilholtz, P. O—Keilholtz, P. O—Keilholtz, P. O—To. Light H. M. Hanson, L. Tregoning, J. Tregoning, A. Lister, J. T. Dick, R. T. T. Dick, R. T. Dick, R. T. Dick, R. T. T. Dick, R. T.	Thomson, E	Thomson, E	Thomson, E

176. ELECTRIC LIGHTING.—18. LIGHTS—INCANDESCENT.

No.	Name.	DATE.	No.	NAME.	DATE.	
348,049	Perkins, C. G.	Aug. 24, 1886	356,795	Slattony M M M	Fob 1 1997	
348,875	Wightman, M. J. and Lemp, H.	Sept 7 1886	357.385	Slattery, M. M. M. Hochhausen, W.	Feb. 1, 1007	
351,855	Edison, T. A.	Nov. 2 1886	358,492	Slattery, M. M. M	Mar 1 1887	
351,856	Edison, T. A.	Nov. 2, 1886	358,599	Edison, T. A		
351.869	Kookogey, W. P.	Nov. 2, 1886	358,600	Edison, T. A		
352,625	Lyman, D. and Wheeler, M	Nov. 16, 1886	359,328	Seel, C		
353,158	Reinmann, A. L.	Nov. 23, 1886	361,455	Settle, M.		
353,333	Van Depoele, C. J	Nov. 30, 1886	362,128	Van Choate, S. F	May 3, 1887	
353,783	Edison, T. A		363,500	Anderson, C. G	May 24, 1887	
354,788	Hickley, A. S.		365,384	Jenkins, P. O	June 28, 1887	
355,714	Reinmann, A. L		365,495	Thompson, E. P	June 28, 1887	
356,019	Voelker, W. L.	Jan. 11, 1887	365,499	Anderson, C. G	June 28, 1887	
	176. ELECTRI	C LIGHTING.	—98. Lig	HTS—Sockets and Keys.		
345,008	Van Gestel, J. T	July 6, 1886	352,006	Schaefer, F	Nov. 2, 1886	
345,335	Thomson, E	July 13, 1886	352,007	Schaefer, F	Nov. 2, 1886	
345,542	Reinmann, A. L	July 13, 1886	360,244	Perkins, C. G.	Mar. 29, 1887	
345,880	Brown, A. G.	July 20, 1886	363,559	Stanley, W., jr.	May 24, 1887	
346,020	Brown, A. G.	July 20, 1886	363,568	Wightman, M. J. and Lemp, H.	May 24, 1887	
347,767	Brown, H. P.	Aug. 24, 1886	365,351	Smith, J	June 21, 1887	
348,647	Weston, E	Sept. 7, 1886				
•	176. ELECTRIC LIC	GHTING.—19.	Lights—	Systems and Appliances.		
9 (5.521	Winkers M. I	T.,1., 19 1000	954 700	Condon I E II	Dec 21 1000	
345;561	Wightman, M. J.	July 13, 1886	354,782	Gordon, J. E. H		
346,388 346,924	Stern, W. A.	July 27, 1886	355,400 355,443	Keeler, T. B. Edwards, H. F.		
347,025	Brush, C. F	Aug. 10, 1886 Aug. 10, 1886	355,446	Greenfield, E. T		
347,528	Speer, A	Aug. 17, 1883	356,270	Bredow, F.		
347,830	Renehan, J. J	Aug. 24, 1886	356,580	Fairbanks, H. H. and Coughlin,	Jan. 25, 1887	
347,952	Murray, P., jr	Aug. 24, 1886	1000,000	W. H.	5 an. 25, 1007	
348,125	Howell, J. W	Aug. 24, 1886	356,614	Bunnell, J. A.	Jan. 25, 1887	
348,155	Dyer, R. N	Aug. 24, 1886	356,629	Ezell, J. S.		
348,407	Moore, J. N. B.	Aug. 31, 1886	356,787	Pyle, H. L		
348,603	Wessels, E. J	Sept. 7, 1886	358,309	Warde, G. H		
348,649	Weston, E	Sept. 7, 1886	359,243	Davis, G. W		
348,708	Willets, J. P. and Crolius, E. R.	Sept. 7, 1886	359,691	Reed, H. T.	Mar. 22, 1887	
348,845	Haskins, C. C.	Sept. 7, 1886	359,713	Cheney, F. A	Mar. 22, 1887	
349,516	Perkins, C. G.	Sept. 21, 1886	359,739	Powers, J. A	Mar. 22, 1887	
349,613	Stanley, W., jr	Sept. 21, 1886	359,916	Brady, T. H.	Mar. 22, 1887	
349,614	Stanley, W., jr	Sept. 21, 1886	360,002	Downing, W. W. and Upham,	Mar. 29, 1887	
350,046	Doubleday, H. M. and Lyman, J	Sept. 28, 1886		A. B.		
350,355	Forsyth, C.S.	Oct. 5, 1886	360,040	Nichols, G. P. and Coombs, M., jr.		
350,958	Thomson, E	Oct. 19, 1886	360,538	Powers, J. A.		
351,369	Ferguson, A. C	Oct. 26, 1886	361,220	Haish, J		
353,349	Buell, C. E.	Nov. 30, 1886	361,495	Diall, M. N		
354,233	Rice, E. W., jr.		361,782	Robb, J. T		
354,258	Slattery, M. M. M		362,399	Schlotterbeck, A. G		
354,291	Williamson, D		363,332	Hammer, W. J	May 21, 1887	
354,758	Adams, J. S		363,702	Vance, S. B. H	May 24, 1887	
354,759 354,760	Adams, J. S		364,221	Curry, J Thomson, F	June 7, 1887	
354,781	Adams, J. S		365,414 365,498	Abbott, G. L	June 28, 1887	
054,101	Gordon, 5. E. II	Dec. 21, 1880	300,430	Abbott, G. 11	5 dite 20, 1007	
	177. EI	LECTRIC SIGN	SALING	-1. Alarms.		
0.40.505	(1) III III I				F 0= 1.00=	
346,587	Glanville, W. L.		356,605	Smith, M. M. and Jones, F. P		
348,227	Mayhew, T	Aug. 31, 1886	356,756	Farnham, W. H. and Askew, C. B.		
350,388	Perry, N. W.		356,771	Leber, L. H. and Currens, M. C.	Feb. 1, 1887	
350,450	Tucker, C. A		357,280	Harvey, W. B	Feb. 8, 1887	
351,746	Derrick, F. E. and Brott, S. C.		358,161	McVay, W	Teb. 22, 1887	
352,203	Reichling, R		358,655	Frik, L	Mar. 1, 1887	
352,407	Glasgow, F	Nov. 9, 1886	358,949	Stern, W. A	Mar. 5, 1557	
354,508 255,284	Fraleigb, S	Jec. 14, 1886	359,581	Toulmin, M	Apr. 19 1987	
355,384	Chinnock, C. E		360,980	Whittier, T. P		
355,793 355,815	Siebel, J. E.		361,968	Olsen, J. L. W	Inno 14 1887	
356,448	Ghegan, J. J.		364,940 365,493	Stecher, M	June 28, 1887	
333, 233	C.M.I., 0. 11	Jan. 20, 1007	500,100	Stocker, 11	20, 1001	
			1	1		

177. ELECTRIC SIGNALING.—2. ALARMS—BURGLAR.

No.	NAME.	DATE.	No.	Name.	Date.
350,823 351,408 351,772 352,861 353,269 354,858 357,190	Fleckinger, J.—Stern, P. K.—Hoffman, J. W.———Dowden, C. H.———Parker, T. H. and Geary, J.—Geary, J.—Farnham, W. H. and Askew, C. B.	Oct. 26, 1886 Nov. 2, 1886 Nov. 16, 1886 Nov. 23, 1886	357,416 357,815 362,010 362,739 363,290 364,764	Schleicher, G Carr, E. E Jewill, G. J Ghegan, J. J Freeman, A. H Lehy, G. B	Feb. 8, 1887 Feb. 15, 1887 Apr. 26, 1887 May 10, 1887 May 17, 1887 June 14, 1887
	177. ELEC	CTRIC SIGNAL	LING.—3.	Annunciators.	
346,609 346,876 348,045 349,579 349,580 350,449 350,626 351,099 351,599 354,209 354,505	Ronsseau, D. Ullman, M. Painter, G. E. Geary, J. Geary, J. Tucker, C. A. Hess, A. T. and Stoltenberg, H. A. Dowden, C. H. Henzel, C. Painter, G. E. Cull, W. J. and Scattergood, C. F.	Dec. 14, 1886	355,791 356,850 357,052 358,250 358,896 359,051 359,984 360,266 360,447 360,448 361,511 364,444	Seiler, P Peachey, J. D Watkins, F. C Barrett, J. A Smith, A. B Blodgett, A. D Swain, C. R Barrett, J. A Kunkle, J. C Kunkle, J. C Harford, A. B Seiler, P	Feb. 1, 1887 Feb. 1, 1887 Feb. 22, 1887 Mar. 8, 1887 Mar. 22, 1887 Mar. 29, 1887 Apr. 5, 1887 Apr. 5, 1887 Apr. 19, 1887
	177.	ELECTRIC SIG	GNALING	3.—7 Bells.	
344,940 346,532 347,634 352,472 353,273 353,274	Carhart, E	Aug. 3, 1886 Aug. 17, 1886 Nov. 9, 1886 Nov. 23, 1886	358,910 359,309 360,025 360,660 362,005 362,216	Wildt, E. A	Mar. 8, 1887 Mar. 15, 1887 Mar. 29, 1887 Apr. 5, 1887 Apr. 26, 1887 May 3, 1887
	177. E	LECTRIC SIG	NALING.	-11. Clocks.	
345,292 346,094 346,862 346,863 346,970 347,572 349,493 349,494 349,650 349,879 350,177 350,430 350,431 350,432 350,433 350,434 350,435 351,222	Fenner, R. E Dickinson, S. C Ramel, A. and Dean, W. W Ramel, A. and Dean, W. W Whiting, H Clarke, C. L Gerry, J. H Gerry, J. H. and Hunter, M. E. Hunter, M. E. and Gerry, J. H. Garcia, D. T Weisgerber, W. F. and Himmer, I. C. Hussey, C. A Thackara, S	July 27, 1886 Aug. 3, 1886 Aug. 3, 1886 Aug. 10, 1886 Aug. 17, 1886 Sept. 21, 1886 Sept. 21, 1886 Sept. 28, 1886 Oct. 5, 1886	351,239 352,320 353,840 354,525 355,434 355,820 356,069 357,310 359,799 360,092 360,902 360,902 363,215 363,440 363,498 364,429 365,023	Abell, J. J. and Gifford, C. B Hedge, J. F., jr Bailey, J. S Himmer, V Broich, J. and Luebke, A. E. G. Himmer, V Himmer, V Etter, J. R Maÿrhofer, C. A Abell, J. J. and Gifford, C. B- Harvey, W. B Delany, P. B Parcelle, A. L Pond, C. H Dickinson, S. C Warner, C. D Zeiner, J. Mejer, G. E Ramel, A. and Dean, W. W	Jan. 11, 1887 Jau. 11, 1887 Feb. 8, 1887 Mar. 29, 1887 Mar. 29, 1887 Apr. 12, 1887 Apr. 12, 1887 Apr. 12, 1887 May 10, 1887 May 17, 1887 May 24, 1887 June 7, 1887
	177. ELF	ECTRIC SIGNA	LING.—	26. Indicators.	
347,399 347,571 348,949 349,605 350,279 352,086 352,647	Vance, T. C. H —————————————————————————————————	Ang. 17, 1886 Sept. 14, 1886 Sept. 21, 1886 Oct. 5, 1886 Nov. 2, 1886	355,382 356,792 356,805 360,381 361,146 361,275	Chapman, W. H. and Donahne, B. C. Ricketson, J. C Stonitsch, J. and Sweet, W. F Fitch, F. K Doremus, W. D Enyart, E. S	Jan. 4, 1887 Feb. 1, 1887 Feb. 1, 1887 Mar. 29, 1887 Apr. 12, 1887 Apr. 19, 1887

177. ELECTRIC SIGNALING.—38. RAILWAY-SIGNALS.

177. ELECTRIC SIGNALING.—38. RAILWAY-SIGNALS.							
No.	NAME.	Date.	No.	Name.	DATE.		
345,641 345,642 346,484 346,485 347,628	Long, M. W	July 13, 1886 July 13, 1886 Aug. 3, 1886 Aug. 17, 1886 Aug. 17, 1886	354,992 357,109 357,296 357,865 357,881	Street, S. T	Dec. 28, 1886 Feb. 1, 1887 Feb. 8, 1887 Feb. 15, 1887 Feb. 15, 1887		
347,752 347,753 349,040 349,927 350,790 351,319 351,384	Vogel, W Vogel, W Hadden, W Daves, W Wicks, P. J Gibson, J. H Le Grande, W. W	Aug. 17, 1886 Aug. 17, 1886 Sept. 14, 1886 Sept. 28, 1886 Oct. 12, 1886 Oct. 19, 1886 Oct. 26, 1886	357,922 358,519 359,040 359,067 359,371 359,512	Hand, W., Wright, M. C. and Pocock, F. A. Westinghouse, G., jr	Mar. 8, 1887 Mar. 8, 1887 Mar. 15, 1887		
351,759 352,412 352,571 352,590 352,700	Graver, E. S. James, De W. C. Pridham, C. W. Toulmin, M. Mahanay, S. C. and Campbell, B. L.	Nov. 2, 1886 Nov. 9, 1886	360,077 360,175 360,638 362,409 364,009 364,204	Wright, G. H Scott, J. McM Westinghouse, G., jr Wicks, P. J Gedge, B. H Armstrong, J. H	Mar. 29, 1887 Mar. 29, 1887 Apr. 5, 1887 May 3, 1887 May 31, 1887		
35 2. 903 353,393	Le Grande, W. W. Williams, T. D., Eitemiller, G. M. and Lucock, J. S.	Nov. 16, 1886 Nov. 30, 1886	365,345	Long, M. W.			
	177. ELH	ECTRIC SIGNA	LING.—	39. Recorders.			
347,038 348,437 349,710 349,767 349,780 351,681 355,742 355,743 355,744 355,745 355,745 355,746 356,070 358,032	Hey, G. W Weiss, C. W Guest, J. H Torrey, A. and Casey, D. J. Bernsee, C. D Wilson, J. C. Wittenberg, C Wittenberg, C Wittenberg, C Wittenberg, C Wittenberg, C Wittenberg, C Gudsmith, J. S	Sept. 28, 1886	358,645 359,307 359,308 359,338 359,346 359,999 360,692 361,678 363,039 365,353	Bundy, W. L. Wittenberg, C. Wittenberg, C. Wheeler, A. D. Capers, J. S. Colby, E. J. Herzberg, A. and Almqvist, A. W. Doehring, C. F. W. and Hoffman, C. G. Abbe, R. W. F. Smith, W. R. and Washburn, A. L.	Mar. 1, 1887 Mar. 15, 1887 Mar. 15, 1887 Mar. 15, 1887 Mar. 15, 1887 Mar. 29, 1887 Apr. 5, 1887 Apr. 26, 1887 May 17, 1887 June 21, 1887		
	177. ELEC	CTRIC SIGNA	LING.—68	8. Thermostats.			
346,938 347,851 347,866 348,473 10,768 350,381 350,548 351,134 351,702 351,719 352,442 352,874 353,637	Muenchinger, G. A. White, J. E. Butz, A. M. Prescott, T. H. Johnson, W. S. Meisenheimer, A. Morley, E. A. Stiegelmaier, W. H. Johnson, W. S. Stone, L. B. Bulen, G. F. Johnson, W. S. Likly, H., Carpenter, C. A. and Graves, F. B. Gnion, R. I.	Aug. 24, 1886 Aug. 24, 1886 Aug. 31, 1886 Sept. 28, 1886 Oct. 5, 1886 Oct. 12, 1886 Oct. 19, 1886 Oct. 26, 1886 Oct. 26, 1886 Nov. 9, 1886 Nov. 16, 1886 Nov. 30, 1886	356,024 356,360 10,802 357,838 358,350 358,511 358,775 358,854 359,210 359,392 360,223 360,823 361,270 362,212 362,212	Bain, F Gee, W Johnson, W. S Lee, C. E Haight, H. J Upton, E. W Graves, F. B Haight, H. J Haight, H. J Johnson, C. W Johnson, E. H Singer, W. F Dickerson, E. N., jr Guion, R. L	Feb. 15, 1887 Feb. 22, 1887 Mar. 1, 1887 Mar. 1, 1887 Mar. 8, 1887 Mar. 8, 1887 Mar. 15, 1887 Mar. 29, 1887 Apr. 5, 1887 Apr. 19, 1887 May 3, 1887		
354,131 10,791 354,932 354,965 355,164 355,892 355,893 355,894 355,895	Guion, R. L. Kells, C. E., jr(Reis.) Price, F. A. Black, C. S. and Pfister, P. C. Guion, R. L. Sternberg, G. M. A. A.	Dec. 14, 1886 Dec. 21, 1886 Dec. 28, 1886 Dec. 28, 1886 Jan. 11, 1887 Jan. 11, 1887 Jan. 11, 1887 Jan. 11, 1887	362,213 362,957 363,644 363,645 364,518 365,089 365,438 365,600	Guion, R. L Haight, H. J Jacobs, H. E Johnson, W. S Morrison, A. E Jacobs, H. E Jacobs, H. E Jacobs, H. E	May 3, 1887 May 17, 1887 May 24, 1887 May 24, 1887 June 7, 1887 June 21, 1887 June 28, 1887 June 28, 1887		
	178.	TELEGRAPH	Y.—46. A	UTOMATIC.			
350,320 353,541	Robertson, J. H Cowper, E. A	Oct. 5, 1886 Nov. 30, 1886	353,592 353,593	Robertson, J. IIRobertson, J. H			

178. TELEGRAPHY.—46. AUTOMATIC.—Continued.

No. Name Date No. Name Date No. Name Date										
1857 1857 1857 1858	No.	NAME.	DATE.	No.	NAME.	DATE.				
344,948 De Solomé, G. F. July 6, 1886 355,558 Brainard, F. R. Jan. 11, 1887 349,708 Gazaitle, II. and Low, H. F. Sept. 28, 1886 355,309 Davis, A. G. Feb. 22, 1887 356,411 Bake, W. Co. 6, 1889 358,611 Johnson, J. E. Levell, J. Mar. 1, 1887 352,643 Cox, H. B. Nov. 2, 1886 363,574 Ball, C. M. and McTighe, T. J. May 3, 1887 Manny, W. B. Dec. 28, 1886 363,574 Ball, C. M. and McTighe, T. J. May 3, 1887 Ball, C. M. and McTighe, T. J. May 3, 1887 Manny, W. B. Dec. 28, 1886 361,498 Sarmer, M. G. Apr. 19, 1887 351,397 Langdon-Invies, C. Oct. 26, 1886 361,749 Manny, M. B. Dec. 28, 1886 Manny, M. B. Dec. 28, 1887 Manny, M. B. Dec. 28, 1	357,038	Robertson, J. H	Feb. 1, 1887							
349,926 Daves, W. Sept. 28, 1886 358,049 Sept. 28, 1886 358,360 Sept. 28, 1886 362,202 Sept		178. TI	ELEGRAPHY	—10. CIRC	UIT CLOSERS.					
349,214	349,708 349,926 350,411 351,488 352,043	Gazaille, H. aud Low, H. F Daves, W Buck, W Bowyer, J. M Cox, H. B	Sept. 28, 1886 Sept. 28, 1886 Oct. 5, 1886 Oct. 26, 1886 Nov. 2, 1886	358,109 358,360 358,614 359,260 362,192	Davis, A. G Krepps, V. A Johnson, J. E Keffer, F. and MeDowell, J. A Thaxter, G. E	Feb. 22, 1887 Feb. 22, 1887 Mar. 1, 1887 Mar. 15, 1887 May 3, 1887				
351,375		178. TEL	EGRAPHY.—4	5. Circuit	S AND SYSTEMS.					
Telegraphy	351,367 354,996 358,890 358,939	Langdon-Davies, C Absterdam, J Selden, C Palmer, N. F	Oct. 26, 1886 Dec. 28, 1886 Mar. 8, 1887 Mar. 8, 1887	361,734 361,797 363,188 363,969	Van Rysselberghe, F	Apr. 26, 1887 Apr. 26, 1887 May 17, 1887 May 31, 1887				
178. TELEGRAPHY.—48. DUPLEX. 361,356 Gardanier, G. W		178. TELEGRAPHY.—47. DIAL.								
361,356 Gardanier, G. W	363,158	McLaughlin, J. F				May 17, 1887				
Telegraphy.		173	8. TELEGRAP	HY.—48.	Duplex.					
Telegraphy Tel	361,356	Gardanier, G. W.	Apr. 19, 1887	361,364	Larisb, J. W. and Maver, W., jr.	Apr. 19, 1887				
346,314 Reeder, E. A		17	8. TELEGRAP	HY.—49.	Дүхэмо.					
346,314 Reeder, E. A	353,128	Field, S. D.				Nov. 23, 1886				
346,355 Clase, J. W		1	178, TELEGRA	PI1Y.—50). Fire.					
347,216 Westcott, C. H. and F Aug. 10, 1886 358,393 Guest, J. H Feb. 22, 1887 356,875 Harkness, W Feb. 1, 1887 364,299 Rogers, C. D June 7, 1887	346,355 346,847 347,318 347,319 348,707 350,126 350,426 350,451 350,634 351,075 352,645 353,766 354,761 354,856	Chase, J. W. Flanders, B. S. Brewer, J. P. and Smith, W. C. Brown, G. W. Wheeler, A. D. Frost, J. W. and Lake, S. D. Tucker, C. A. McCullough, L. H. Chase, S. A. Sloeum, E. L. Gaynor, T. F. Thompson, A. and Ritchie, R. O. Anderson, A. Frost, J. W. Meyer, A.	July 27, 1886 Aug. 3, 1886 Aug. 17, 1886 Aug. 17, 1886 Oct. 5, 1886 Oct. 5, 1886 Oct. 5, 1886 Oct. 12, 1886 Oct. 12, 1886 Oct. 12, 1886 Oct. 19, 1886 Oct. 19, 1886 Dec. 21, 1886 Dec. 21, 1886 Jan. 4, 1887	357,960 358,694 358,864 359,686 359,687 359,688 359,823 359,824 360,252 360,824 360,968 361,901 362,477 365,365 365,726	Horne, W. L Pearce, F. and Jones, J Lvon, F. G Noyes, B. J Noyes, B. J Noyes, B. J Taussig, S Taussig, S Smith, W. C Singer, W. F Martin, M Smith, J. E Coughlin, J. J Cole, F. W Bulen, G. F	Feb. 15, 1887 Mar. 1, 1887 Mar. 1, 1887 Mar. 22, 1887 Mar. 29, 1887 Apr. 5, 1887 Apr. 12, 1887 Apr. 26, 1887 Apr. 26, 1887 June 28, 1887				
356,875 Harkness, W Feb. 1, 1887 364,299 Rogers, C. D June 7, 1887		178. TELEGRAI	PHY.—101. FIR	E-ALARM	IS AND EXTINGUISHERS.	1				
	356,875	Harkness, W	Feb. 1, 1887	364,299	Rogers, C. D	June 7, 1887				

178. TELEGRAPHY.—29. Keys.

No.	NAME.	DATE.	No.	NAME.	DATE.
346,930 351,485	Macready, R. A Biggs, J. M		351,834 354,814	Jenkins, M. R Steiner, J	Nov. 2, 1886 Dec. 21, 1886
•	178. TEL	EGRAPHY.—3	0. LIGHT	NING-ARRESTERS.	1
363,567	Wightman, M. J. and Lemp, H				May 24, 1887
	178.	TELEGRAPH	Y.—51. M	IULTIPLEX.	
345,721 355,860 360,986	Parcelle, A. L. Brown, R. G. Beale, A. M. A.	July 20, 1886 Jan. 11, 1887 Apr. 12, 1887	360,987 360,988	Beale, A. M. A Beale, A. M. A	Apr. 12, 1887 Apr. 12, 1887
	178. 7	relegraphy	.—52. PE	RFORATING.	
352,600	Wright, C. G		*****		Nov. 16, 1886
	178	TELEGRAPH	IY.—54. I	PRINTING.	
345,245 350,469 350,615 350,616 350,616 350,617 350,983 350,984 352,059 352,143 352,435 354,001	Mahnken, H Scott, D. B Buckingham, C. L Buckingham, C. L Buckingham, C. L Linville, J. H Linville, J. H Kaler, W. A Munson, J. E Wilson, J. C Wirsching, A	Oct. 12, 1886 Oct. 19, 1886 Oct. 19, 1886 Nov. 2, 1886 Nov. 9, 1886 Nov. 9, 1886	355,662 358,379 360,994 360,995 364,343 364,525 364,893 364,894 365,059 365,705	Pike, D. E	Feb. 22, 1887 Apr. 12, 1887 Apr. 12, 1887 June 7, 1887 June 14, 1887 June 14, 1887 June 21, 1887
	178.	relegraphy	7.—55. Qu	JADRUPLEX.	
349,945 351,933	Maver, W., jr Moffatt, J. M. and Blakeney, E_	Sept. 28, 1886 Nov. 2, 1886	352,865 360,528	Freir, S. P Jones, F. W	Nov. 16, 1886 Apr. 5, 1887
	178. 1	ELEGRAPHY	.—56. RA	ILWAY-CAR.	
350,234 350,235 351,524 351,525 353,789 354,302 354,460	Edison, T. A. and Gilliland, E. T Edison, T. A. and Gilliland, E. T Phelps, L. J	Oct. 5, 1886 Oct. 5, 1886 Oct. 26, 1886 Oct. 26, 1886 Dec. 7, 1886 Dec. 14, 1886 Dec. 14, 1886	354,827 355,055 355,468 355,469 355,470 359,990 361,730	Burton, G. D	Dec. 21, 1886 Dec. 28, 1886 Jan. 4, 1887 Jan. 4, 1887 Jan. 4, 1887 Mar. 29, 1887 Apr. 26, 1887
	17	8. TELEGRAP	PHY.—63.	Reed.	
345,209 360,844	Brown, R. G Barnard, W. T	July 6, 1886 Apr. 12, 1887	365,103	Selden, C	June 21, 1887
	178. TELE	GRAPHY.—41.	. Relays	AND SOUNDERS.	
350,644 352,317 352,725 353,288 354,139	Stewart, G. W	Oct. 12, 1886 Nov. 9, 1886 Nov. 16, 1886 Nov. 30, 1886 Dec. 14, 1886	354,815 355,431 357,789 360,308 364,619	Steiner, J Arthur, W Rutherford, R. C Knudson, A. A Woods, G. T	Dec. 21, 1886 Jan. 4, 1887 Feb. 15, 1887 Mar. 29, 1887 June 7, 1887

178. TELEGRAPHY.--69. TRANSMITTERS.

170. IMEEGIVALIII.—09. IKANSMITTERS.					
No.	NAME.	Date.	No.	NAME.	Date.
350,882 352,549	Herrmann, C Le Grande, W. W. and Burton, G. W.	Oct. 12, 1886 Nov. 16, 1886	353,715 356,418.	Shryock, J. W Nickum, G. S	Dec. 7, 1886 Jan. 18, 1887
	179. TELI	EPHONY.—82.	Anti-Ind	uction Devices.	
348,512	Carty, J. J	Aug. 31, 1886	355,420	Stockwell, J. O	Jan. 4, 1887
	179. TELEP	HONY.—81. Co	NDUCTORS	-Anti-Inductive.	
346,509 346,510	Spalding, H. CSpalding, H. C		350,715	Barrett, J. A	Oct. 12, 1886
	179. TE	LEPHONY.—5	7., Telepi	HONES—CALLS.	
347,097 349,839 349,976 350,610 351,597	Edison, T. A	Aug. 10, 1886 Sept. 28, 1886 Sept. 28, 1886 Oct. 12, 1886 Oct. 26, 1886	352,948 355,383 361,020 361,365	Glover, L. S	Jan. 4, 1887
348,114 350,203 350,737 354,818	Edison, T. A	Oct. 5, 1886 Oct. 12, 1886 Dec: 21, 1886	356,688 359,492 362,099 362,100	Johnson, E. H Balloch, C Maloney, J. A Maloney, J. A	Mar. 15, 1887 May 3, 1887
344,938 345,084 345,085 345,658 345,668 345,762 346,846 347,924 348,430 348,501 350,215 350,299 350,772 351,569 352,178 352,178 352,177 352,178 352,179 352,179 352,333 353,536 353,694 353,755	Bergmann, S Spaulding, E. S. Spaulding, E. S. Young, J. P Brambel, G Ehrlich, H Dann, J. E. and Lapp, J Townsend, L Stanley, W., jr Sargent, F. G Dolbear, A. E Roberts, G. L Cole, W. R Berliner, E Collins, W. H Bonta, J. W Bonta, J. W Bonta, J. W Bonta, J. W Cole, W. R Wheless, M. and Darden, J. D Wallace, T. and En Holm, O. A Burnley, W McDonough, J. W Palmer, N. F	July 6, 1886 July 6, 1886 July 6, 1886 July 13, 1886 July 13, 1886 Aug. 3, 1886 Aug. 24, 1886 Aug. 31, 1886 Oct. 5, 1886 Oct. 5, 1886 Oct. 12, 1886 Oct. 19, 1886 Oct. 26, 1886 Nov. 9, 1886 Nov. 16, 1886 Nov. 16, 1886 Nov. 30, 1886 Nov. 30, 1886 Nov. 30, 1886 Dec. 7, 1886	354,241 354,542 355,149 355,426 355,686 355,838 355,952 356,689 357,054 357,134 357,359 357,452 358,812 358,812 358,940 359,188 361,047 361,124 363,449 364,472	Rose, A. W Drawbaugh, D Drawbaugh, D Dolbear, A. E Watkins, F. C Egan, C. E Pratt, H. P. and McPherson, L. O. Stut, J. C. H Freeman, J. P Beale, A. M. A Johnson, E. H Watkins, F. C Stockwell, J. O Barney, W. C Blake, F House, W. D Palmer, N. F Palmer, N. F Tabory, J. H Burnley, W Bonta, J. W Carty, J. J Bock, L., jr Bonta, J. W	Jan. 18, 1887 Jan. 25, 1887 Feb. 1, 1887 Feb. 8, 1887 Feb. 8, 1887 Mar. 1, 1887 Mar. 8, 1887 Mar. 8, 1887 Mar. 8, 1887
	179. TEL	EPHONY.—60.	Тегерно	NES—MAGNETIC.	
344,983 346,031 346,377 346,962 347,374 348,077	Phelps, A. M. Emmner, J., jr Lockwood, W. C. Turnbull, W. C. Perrin, T. J. Watson, T. A.	July 20, 1886 July 27, 1886 Ang. 10, 1886	348,134 348,429 349,312 349,575 350,130 351,209	Lugo, O	Aug. 24, 1886 Aug. 31, 1886 Sept. 21, 1886 Sept. 21, 1886 Oct. 5, 1886 Oct. 19, 1886

179. TELEPHONY.—60. TELEPHONES—MAGNETIC.—Continued.

				MAGNETIC.—Continued.	
No.	NAME.	Date.	No.	NAME.	DATE.
351,258 351,905 352,735 354,169 354,402 355,032 355,424 355,685	Farmer, M. G Eickemeyer, R Cole, W. R Morton, W. J Eichmeyer, J. C Schneekloth, H. A Watkins, F. C Egan, C. E	Nov. 2, 1886 Nov. 16, 1886 Dec. 14, 1886 Dec. 14, 1886 Dec. 28, 1886 Jan. 4, 1887	355,687 355,734 356,197 357,360 360,068 360,626 361,481	Egan, C. E— Waite, H. E— Gilliland, E. T— Barney, W. C— Waite, H. E— Tabony, J. H— Bell, C. S—	Jan. 11, 1887 Jan. 18, 1887 Feb. 8, 1887 Mar. 29, 1887 Apr. 5, 1887
	179. TELE	PHONY.—61. 7	CELEPHON	ES-MECHANICAL.	
346,594 347,325 348,328 348,896 351,704 352,577 353,489 353,683 353,684 355,363 356,594 357,967	Lord, G. W Davis, A. W. S Kenyon, B. L Eastman, W. H Knudson, A. A Shaver, G. F Gerst, M Jones, J. S Jones, J. S Weinhaus, T. H Lord, G. W Radford, C. M	Aug. 17, 1886 Aug. 31, 1886 Sept. 7, 1886 Oct. 26, 1886 Nov. 16, 1886 Nov. 30, 1886 Dec. 7, 1886 Dec. 7, 1886 Jan. 4, 1887 Jan. 25, 1887	357,995 358,357 359,215 359,216 359,217 359,218 360,362 361,302 361,499 363,249 365,525	Howard, J. H Jones, J. S Lord, G. W Radford, C. M Lord, G. W Garl, M Lauboff, J Lauhoff, J	Feb. 15, 1887 Feb. 22, 1887 Mar. 8, 1887 Mar. 8, 1887 Mar. 8, 1887 Mar. 29, 1887 Apr. 19, 1887 Apr. 19, 1887 Apr. 19, 1887 June 28, 1887
	179. TELEP	PHONY.—62. T	ELEPHONI	es-Radiophones.	
356,877	Hobenstein, C. J			· · · · · · · · · · · · · · · · · · ·	Feb. 1, 1887
	179. TELEPHON	Y.—77. TELEP	HONES-R	ELAYS AND REPEATERS.	
351,257	Farmer, M. G				Oct. 19, 1886
	179. TELF	CPHONY.—100.	Теперно	ONES—SUPPORTS.	
348,120 351,389	Gaskins, G. HMead, C. K	Aug. 24, 1886 Oct. 26, 1886	357,337 362,115	Rosenblatt, SRosenblatt, S	Feb. 8, 1887 May 3, 1887
	179. TELEP	HONY.—85. Tr	ELEPHONE	s-Switch-Boards.	
346,183 353,184 355,425	Waters, E. G. and Sweeny, R. G. Wehrle, J. H.——————————————————————————————————	July 27, 1886 Nov. 23, 1886 Jan. 4, 1887	357,538 357,821	Scribner, C. E Ford, W. S	Feb. 8, 1887 Feb. 15, 1887
	179. TELI	EPHONY.—71.	Тегерно	NES—SWITCHES.	
348,936 352,474	Turnbull, W. CLüngen, A	Sept. 7, 1886 Nov. 9, 1886	357,682 359,356	McDonough, J. W. and Eldred, H. H. Hitchcock, C. A	Feb. 15, 1887 Mar. 15, 1887
	179. TEL	EPHONY.—64.	TELEPHO	ONES—SYSTEMS.	
345,325 345,326 346,515 346,708 346,865 346,866 348,139 348,578 348,579	Scribner, C. E	July 13, 1886 July 13, 1886 Aug. 3, 1886 Aug. 3, 1886 Aug. 3, 1886 Aug. 3, 1886 Aug. 24, 1886 Sept. 7, 1886 Sept. 7, 1886	349,042 349,043 349,539 349,947 350,024 350,160 351,588 352,596 353,350	Herz, C	Sept. 14, 1886 Sept. 14, 1886 Sept. 21, 1886 Sept. 28, 1886 Sept. 28, 1886 Oct. 5, 1886 Oct. 26, 1886 Nov. 16, 1886 Nov. 30, 1886

179. TELEPHONY.—64. TELEPHONES—Systems—Continued.

No.	NAME.	DATE.	No.	NAME.	DATE.
353,940 354,469 354,942 355,189 355,226 355,741 355,928 355,929 356,040 356,425 356,426 356,427 356,859 357,051	Hayes, H. V Gould, C. C. Shaver, G. F McLaughlin, J. F McLaughlin, J. F Smith, D. J. and Sinclair, D Gould, C. C. and Smith, W Gould, C. C. and Smith, W Hitchcock, C. A. and Burnley, W Scribner, C. E Scribner, C. E Scribner, C. E Warner, E. P Watkins, F. C	Dec. 14, 1886 Dec. 28, 1886 Dec. 28, 1886 Dec. 28, 1886 Jan. 11, 1887 Jan. 11, 1887 Jan. 11, 1887 Jan. 18, 1887 Jan. 18, 1887 Jan. 18, 1887 Feb. 1, 1887	357,053 357,372 357,539 357,540 357,589 357,689 357,687 359,306 359,575 359,575 359,747 362,217 362,652 364,133	Watkins, F. C Crowdus, W. A Seely, J. A Seely, J. A Fontaine, A. S Patterson, C. A Mehren, J. F Wiley, G. L Wittenberg, C Mehren, J. F. and Carroll, W Tabony, J. H Kellogg, M. G O'Connell, J. J Richardson, J. D	Mar. 22, 1887 May 3, 1887 May 10, 1887
179. TELEPHONY.—99. TELEPHONES—SYSTEMS—AUTOMATIC.					
349,975	349,975 Bickford, J. H				

11303-250

APPENDIX No. VI.

PART II

CONSISTING OF A

NUMERICAL AND CHRONOLOGICAL INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1, 1886, to June 30, 1887, inclusive, giving names of Inventors, numbers and dates of Patents, and the sub-class to which each belongs.



NUMERICAL INDEX

of

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1886, TO JUNE 30, 1887.

No.	Name.	CLASS.	DATE.
344,818	Drawbaugh, D	Induction-coils	July 6, 1886
344,823	Fottrell, J	Conductors	July 6, 1886
344,827	Grant, J	Conductors, underground	
344,843	Macdonald, R	do	
344,882	Trippe, S. L	Batteries, secondary	
344,938	Bergmann, S	Telephones, electric	
344,940	Carhart, E	Bells	July 6, 1886
344,946	De Solomé, G. F	Batteries, galvanic	
344,947 344,948	De Solomé, G. F De Solomé, G. F	do	
344,957	Farbaky, S. and Schenek, S	Batteries, secondary	July 6, 1886
344,962	Harris, R. L	Locomotion	July 6, 1886
344,983	Phelps, A. M	Telephones, magnetic	
345,008	Van Gestel, J. T	Lights, sockets and keys	
345,025	Blodgett, F. M	Medical and surgical, body-wear	
345,084	Spaulding, E. S	Telephones, electric	July 6, 1886
345,085	Spaulding, E. S	do	July 6, 1886
345,124	De Virloy, A. L., Commelin, E., and Bailhache, G.	Batteries, secondary	July 6, 1886
345,178	Rockwell, R. N	Medical and surgical, body-wear	July 6, 1886
345,209	Brown, R. G	Telegraphy, reed	July 6, 1886
345,212	Byllesby, H. M	Systems of distribution	July 6, 1886 July 6, 1886
345,245 345,292	Mahnken, H		July 13, 1886
345,325	Scribner, C. E	Telephones, systems	July 13, 1886
345,326	Scribner, C. E	do	July 13, 1886
345,334	Thomson, E	Motors	July 13, 1886
345,335	Thomson, E	Lights, sockets and keys	July 13, 1886
345,336	Thomson, E	Magneto-electric	July 13, 1886
345,383	Kessler, H. P. J	Separators	July 13, 1886
345,452	Roth, C. W.	Applications, general	July 13, 1886
345,511	Khotinsky, A	Batteries, secondary	July 13, 1886
345,539	Pfannkuche, A	Lights, filaments and carbons	July 13, 1886
345,542	Reinmann, A. L	Lights, sockets and keys	July 13, 1886
345,561 345,596	Wightman, M. J.	Lights, systems and appliancesApplications, tools and machines	July 13, 1886
345,641	Long, M. W-		
345,642	Long, M. W	do	July 13, 1886
345,658	Young, J. P.	Telephones, electric	July 13, 1886
345,700	Kinsman, F. E	Car brakes	July 20, 1886
345,720	Parcelle, A. L	Motors	July 20, 1886
345,721	Parcelle, A. L	Telegraphy, multiplex	July 20, 1886
345,755	Wirt, C	Galvanometers	July 20, 1886
345,756	Wirt, C	Batteries, galvanic	
345,762 345,838	Brambel, G	Telephones, electric	July 20, 1886 July 20, 1886
345,845	Giles, C. K. and Fenner, R. E.——————————————————————————————————	Applications, general Locomotion	July 20, 1886
345,860	Reinmann, A. L	Lights, filaments and carbons	July 20, 1886
345,880	Brown, A. G	Lights, sockets and keys	July 20, 1886
345,884	Chinnock, C. E	Locomotion	July 20, 1886
345,937	Waterhouse, A. G.	Lights, are	July 20, 1886
345,956	Eaton, A. K	Conductors, lead-covered	July 20, 1886
345,998	Smith, R. F Brown, A. G	Applications, tools and machines.	July 20, 1886
346,020	Brown, A. G	Lights, sockets and keys	July 20, 1886
346,031	Emmner, J., jr.	Telephones, magnetic	July 20, 1886
346,032 346,053	Erhard, T	Batteries, galvanic	July 20, 1886 July 20, 1886
346,094	Lugo, O Dickinson, S. C	doClocks	July 27, 1886
	DICINIDUM, D. C	Telephones, switch-boards	0 (4) 21, 1000

No.	Name.	· CLASS.	DATE.
346,207	Le Grande, W. W	Batteries, galvanic	July 27, 1886
346,215	Murray, J. H.	Medical and surgical, body-wear - :	
346,217	Noble, C. B	Lights, are	July 27, 1886
346,237	Smith, R. T	Applications, general	July 27, 1886
346,250	Wheaton, F	Conductors, underground	July 27, 1886
346,314	Reeder, E. A Ball, C. M	Telegraphy, fire Lights, filaments and carbons	
346,345 346,355	Chase, J. W	Telegraphy, fire	
346,377	Lockwood, W. C	Telephones, magnetic	July 27, 1886
346,388	Stern, W. A.	Lights, systems and appliances	
346,395	Brewer, H. J	Batteries, galvanic	July 27, 1886
346,414	Patterson, W. R	Conductors	
346,423	Burton, G. D	Connectors	July 27, 1886
346,430	Cutten, E. B.	Lights, are	July 27, 1886
346,433 346,465	Duplain, F. P	Locomotion	
346,475	Hawken, T.	Insulators	
346,484	Liemke, H. H	Railway signals	
346,485	Liemke, H. H	do	Aug. 3, 1886
346,505	Sears, J. W	Valve-controllers	
346,509	Spalding, H. C	Conductors, anti-inductive	
346,510	Spalding, H. C	Tolophones evetoms	
346,515 346,527	Sweeny, R. G Beattie, J., jr	Telephones, systems	
346,528	Beattie, J., jr	Induction-coils	. 0 ./
346,532	Crockett, C. H. and Allen, C. C	Bells	
346,533	Crockett, C. H. and Allen, C. C	Igniting devices	Aug. 3, 1886
346,561	Pyle, G. C	Lights, are	
346,587	Glanville, W. L	Alarms	
346,594	Lord, G. W	Telephones, mechanical	
346,609 346,645	Rousseau, DCruickshank, G. M	Annunciators Conductors	
346,688	Robinson, W. L	Conductors, underground	
346,708	Bell, C. A	Telephones, systems	
346,724	Chandler, T. P., jr	Locomotion	Aug. 3, 1886
346,840	Campbell, E	Conductors, underground	Aug. 3, 1886
346,846	Ehrlich, H	Telephones, electric	Aug. 3, 1886
346,847	Flanders, B. S.	Telegraphy, fire	Aug. 3, 1886
346,862 346,863	Ramel, A. and Dean, W. W.—————————————————————————————————	Clocks do	Aug. 3, 1886 Aug. 3, 1886
346,865	Rose, P. L. and Rein, G	Telephones, systems	Aug. 3, 1886
346,866	Rose, P. L. and Rein, G	do	Aug. 3, 1886
346,876	Ullman, M	Annunciators	Aug. 3, 1886
346,902	Edgar, E. F	Locomotion	Aug. 10, 1886
346,924	Knell, J. W		Aug. 10, 1886
346,930 346,938	Macready, R. A	The sympostate	Aug. 10, 1886 Aug. 10, 1886
346,942	Patterson, W. R		Aug. 10, 1886
346,957	Stevens, W. L		Aug. 10, 1886
346,962	Turnbull, W. C.	Telephones, magnetic	Aug. 10, 1886
346,963	Van Depoele, C. J	Locomotion	Aug. 10, 1886
346,965	Warner, E. P.		
346,970 346,971	Whiting, H		
346,972	Wilson, J	Insulatorsdo	
346,990		Locomotion	
347,013		Applications, general	
347,023	Berliner, E	Batteries, secondary	Aug. 10, 1886
347,025	Brush, C. F	Lights, systems and appliances	Aug. 10, 1886
347,029	Fisher, W. C	Magnetic locks and bolts	Aug. 10, 1886
347,038		Recorders	
347,068 347,069	Sedowick, F	Magnetic locks and bolts	Aug. 10, 1886
347,070		do	
347,071		do	
347,075	Timmis, I. A. and Forbes, G	Car brakes	Aug. 10, 1886
347,097	Edison, T. A	Telephones, calls	Aug. 10, 1886
347,120		Rheostats	
347,140		Heaters	
347,141 347,142		do	
347,164		Lights, filaments and carbons	
347,204		Regulators	
347,216	Westcott, C. H. and F	Telegraphy, fire, alarms and extinguishers	Aug. 10, 1886
347,218	Williamson, D	Lights, are	Aug. 10, 1886
047,210	TO YEL		
347,231 347,247	De Khotinsky, A	Batteries, secondary Lights, filaments and carbons	Aug. 10, 1886

No.	NAME.	CLASS.	DATE.
347,258	Starr, E. T	Batteries, secondary	Aug. 10, 1886
347,259	Starr, E. T.	Batteries, galvanic	Aug. 10, 1886
347,300	Julien, E	Batteries, secondary	Aug. 10, 1886
347,318 347,319	Brewer, J. P. and Smith, W. C	Telegraphy, fire	Aug. 17, 1886
347,325	Davis, A. W. S	Telephones, mechanical	Aug. 17, 1886 Aug. 17, 1886
347,374	Perrin, T. J.	Telephones, magnetic	Aug. 17, 1886
347,399	Vance, T. C. H	Indicators	Aug. 17, 1886
347,440 347,454	Partz, A. F. W	Batteries, galvanicInsulators	Aug. 17, 1886
347,528	Speer, A	Lights, systems and appliances	Aug. 17, 1886 Aug. 17, 1886
347,571	Clarke, C. L	Indicators	Aug. 17, 1886
347,572	Clarke, C. L	Clocks	Aug. 17, 1886
347,589	Ghegan, J. J	Valve-controllers	Aug. 17, 1886
347,592 347,602	Gray, I ———————————————————————————————————	Medical and surgical, body-wear Telegraph-poles	Aug. 17, 1886 Aug. 17, 1886
347,625	McIntire, C.	Connectors	
347,628	MeQueen, F. J	Railway signals	Aug. 17, 1886
347,634	Nicholson, H. C	Bells	Aug. 17, 1886
347,635 347,642	O'Brien, J	Insulators ————————————————————————————————————	
347,656	Smith, R. F	Applications, tools and machines	
347,707	Grovesteen, M. W	Valve-controllers	Aug. 17, 1886
347,752	Vogel, W	Railway signals	
347,753 347,754	Vogel, W	Batteries, galvanic	
347,766	Brown, H. P. and F. H	Rheostats	
347,767	Brown, H. P.	Lights, sockets and keys	
347,768	Buell, C. E	Batteries, secondary, applications	Aug. 24, 1886
347,823	Neyraud, J. B	Batteries, galvanic	
347,830 347,851	Renehan, J. J.	Lights, systems and appliances Thermostats	Aug. 24, 1886 Aug. 24, 1886
347,866	Butz, A. M	do	Aug. 24, 1886
347,901	Van Depoele, C. J	Locomotion	Aug. 24, 1886
347,902	Van Depoele, C. J	Motors	Aug. 24, 1886
347,903	Van Depoele, C. J Van Depoele, C. J	Car-brakes	Aug. 24, 1886
347,904 347,905	Van Depoele, C. J		Aug. 24, 1886 Aug. 24, 1886
347,924	Dann, J. E. and Lapp, J.	Telephones, electric	Aug. 24, 1886
347,937	Hunter, R. M	Regulators	Aug. 24, 1886
347,943	Leonardson, J. M.	Insulators	Aug. 24, 1886
347,952 347,964	Murray, P., jr ———————————————————————————————————	Lights, systems and appliances	Aug. 24, 1886 Aug. 24, 1886
348,008	Harris, R. L	Locomotion	Aug. 24, 1886
348,045	Painter, G. E	Annunciators	Aug. 24, 1886
348,048	Perkins, C. G	Cut-outs, thermal	Aug. 24, 1886
348,049 348,077	Perkins, C. G	Lights, incandescent	Aug. 24, 1886 Aug. 24, 1886
348,114	Edison, T. A	Telephones, details	Aug. 24, 1886
348,120	Gaskins, G. H	Telephones, supports	Aug. 24, 1886
348,121	Gilbert, G. A	Separators	Aug. 24, 1886
348,125	Howell, J. W Lugo, O		Aug. 24, 1886 Aug. 24, 1886
348,134 348,139	Pope, E	Telephones, systems	Aug. 24, 1886
348,155		Lights, systems and appliances	Aug. 24, 1886
348,227	Mayhew, T	Alarms	Aug. 31, 1886
348,328	Kenyon, B. L	Telephones, mechanical	Aug. 31, 1886 Aug. 31, 1886
348,360 348,371	Van Depoele, C. J	Car-brakes	Aug. 31, 1886
348,385	Deprez, M. and Carpentier, J.	Regulators	Aug. 31, 1886
348,406	McGrady, J. and Sloane, G. H	Medical and surgical, body-wear	Aug. 31, 1886
348,407	Moore, J. N. B	Lights, systems and appliances	Aug. 31, 1886
348,429 348,430	Townsend, L	Telephones, magnetie———————————————————————————————————	Aug. 31, 1886 Aug. 31, 1886
348,437	Weiss, C. W	Recorders	Aug. 31, 1886
348,455	Fairchild, J. M.	Cut-outs, mechanical	Aug. 31, 1886
348,456	Fairchild, J. M. and O'Connor, J	do	
	Hard, J. R	Induction-coils	Aug. 31, 1886 Aug. 31, 1886
348,465		LUCIOUSINS	41 mg, 61, 1000
348,465 348,473	Prescott, T. H Short, S. H. and Nesmith, J. W		Aug. 31, 1886
348,465	Short, S. H. and Nesmith, J. W Short, S. H. and Nesmith, J. W	Locomotion	Aug. 31, 1886
348,465 348,473 348,476 348,477 348,482	Short, S. H. and Nesmith, J. W	Locomotiondo do Batteries, secondary	Aug. 31, 1886 Aug. 31, 1886
348,465 348,473 348,476 348,477 348,482 348,501	Short, S. H. and Nesmith, J. W Short, S. H. and Nesmith, J. W Trippe, S. L Stanley, W., jr	Locomotiondo Batteries, secondary Telephones, electrie	Aug. 31, 1886 Aug. 31, 1886 Aug. 31, 1886
348,465 348,473 348,476 348,477 348,482 348,501 348,512	Short, S. H. and Nesmith, J. W Short, S. H. and Nesmith, J. W Trippe, S. L Stanley, W., jr Carty, J. J	Locomotion	Aug. 31, 1886 Aug. 31, 1886 Aug. 31, 1886 Aug. 31, 1886 Sept. 7, 1886
348,465 348,473 348,476 348,477 348,482 348,501	Short, S. H. and Nesmith, J. W Short, S. H. and Nesmith, J. W Trippe, S. L Stanley, W., jr	Locomotion	Aug. 31, 1886 Aug. 31, 1886 Aug. 31, 1886 Aug. 31, 1886 Sept. 7, 1886 Sept. 7, 1886

No.	NAME.	CLASS.	DATE.
	D 1 (0) Y	m 1 1	G + 7 1000
348,578	Perrin, T. J	Telephones, systemsdo	Sept. 7, 1886 Sept. 7, 1886
348,579 348,603	Wessels, E. J	Lights, systems and appliances	Sept. 7, 1886
348,606	Worth, A. B	Applications, general	
348,625	Farbaky, S. and Schenek, S	Batteries, secondary.	Sept. 7, 1886
348,636	Park, H. S	Car-hrakes.	Sept. 7, 1886
348,646 348,647	Weston, E	Lights, sockets and keys	Sept. 7, 1886 Sept. 7, 1886
348,648	Weston, E	Meters	Sept. 7, 1886
348,649	Weston, E	Lights, systems and appliances	Sept. 7, 1886
348,707	Wheeler, A. D Willets, J. P. and Crolius, E. R	Telegraphy, fire	Sept. 7, 1886
348,708 348,771	Payne, C. Q	Lights, systems and appliancesSeparators	Sept. 7, 1886 Sept. 7, 1886
348,792	Smith, M. H	Locomotion	Sept. 7, 1886
348,799	Thone, F	Lights, are	Sept. 7, 1886
348,822	Belk, J. C	Conductors	Sept. 7, 1886
348,845	Wightman M. Land Lamp H	Lights, systems and appliancesLights, incandescent	Sept. 7, 1886 Sept. 7, 1886
348,875 348,876	Wightman M. J.	Regulators	Sept. 7, 1886
348,880	Averell, W. W	Locomotion	Sept. 7, 1886
348,883	Bossard, A	Magneto-electric	Sept. 7, 1886
348,896	Eastmann, W. H.——————————————————————————————————	Telephones, mechanicalBatteries, galvanic	Sept. 7, 1886
348,901 348,927	Pfannkuche, G	Lights, are	
348,936	Turnbull, W. C	Telephones, switches	Sept. 7, 1886
348,949	Böhling, J	Indicators	Sept. 14, 1886
348,971	Heymann, E. and F. W	Lights, arc	Sept. 14, 1886
348,972	Heymann, E. and F. W	do	Sept. 14, 1886 Sept. 14, 1886
348,973 348,977	Keilholtz, P. O	do	Sept. 14, 1886
348,978	Keilholtz, P. O	do	Sept. 14, 1886
348,994	Pearce, T. J. and Beardsley, M. W	Conductors	Sept. 14, 1886
349,022	Wilson, J.	Insulators	Sept. 14, 1886
349,040 349,042	Herz, C	Railway signals Telephones, systems	
349,043	Herz, C	do	Sept. 14, 1886
349,049	Lippincott, J. E	Telegraph-poles	Sept. 14, 1886
349,109	Lenaerts, L	Valve-controllers	
349,214 349,222	Farmer, M. G. Jarriant, B. Jarr	Telegraphy, circuits and systems Batteries, galvauic	
349,312	Marshall, W	Telephones, magnetic	
349,380	Bazin, E	Batteries, galvanic	Sept. 21, 1886
349,392	Hansell, W	Magneto-electric	Sept. 21, 1886
349,397 349,398	Lantz J A	Connectorsdo	Sept. 21, 1886 Sept. 21, 1886
349,422	Bartlett, C. O	Separators	Sept. 21, 1886
349,472	Anderson, J. C	Conductors, underground	Sept. 21, 1886
349,493	Gerry, J. H.	Clocksdo	Sept. 21, 1886
349,494 349,516		Lights, systems and appliances	
349,533	Smith, A. T	Igniting devices	Sept. 21, 1886
349,539	Tabony, J. H	Telephones, systems	Sept. 21, 1886
349,563		Motors	
349,572		Lights, filaments and carbons————————————————————————————————————	
349,575 349,579		Annunciators	
349,580	Geary, J	do	Sept. 21, 1886
349,600	Piper, C. E.	Batteries, galvanic	Sept. 21, 1886
349,605		Induction-coils	
349,611 349,612	Stanley W. ir	do	Sept. 21, 1886 Sept. 21, 1886
349,613	Stanley, W., jr	Lights, systems and appliances	Sept. 21, 1886
349,614	Stauley, W., jr.	do	Sept. 21, 1886
349,615	Stanley, W., jr	Magneto-electric	Sept. 21, 1886
349,616 349,617	Stanley W., jr	Induction-coilsdodo	Sept. 21, 1886 Sept. 21, 1886
349,650	Hunter, M. E. and Gerry, J. H.	Clocks	Sept. 21, 1886
349,654	Keegan, V. E	Motors	Sept. 21, 1886
349,708	Gazaille, H. and Low, H. F.	Circuit-closers	Sept. 28, 1886
349,710		Recorders	Sept. 28, 1886 Sept. 28, 1886
349,715 349,716	Higham, E. T. and D	Motors	Sept. 28, 1886 Sept. 28, 1886
349,738		Car-brakes	
		Conductors, underground	
349,739	Terkins, C. G	Conditions, dates ground to the conditions of the condition of the conditions of the conditions of the conditions of the	
349,739 349,767	Torrey, A. and Casey, D. J	Recorders	Sept. 28, 1886
349,739	Berusee, C. D	Recordersdo	Sept. 28, 1886 Sept. 28, 1886

No.	NAME.	CLASS.	DATE.
349,797	Jagel, J. M	Conductors, underground	Sept. 28, 1886
349,809	Perkins, C. G	Connectors	Sept. 28, 1886
349,839	Gannon, P	Telephones, calls	Sept. 28, 1886
349,849 349,879	Kugler, G	Medical and surgical, body-wear	Sept. 28, 1886
349,893	McGill, S. F	Conductors	Sept. 28, 1886 Sept. 28, 1886
349,912	Thomson, E	Magneto-electric	Sept. 28, 1886
349,926	Daves, W	Circuit-closers	Sept. 28, 1886
349,927 349,945	Daves, W	Railway signals————————————————————————————————————	Sept. 28, 1886 Sept. 28, 1886
349,947	Mehren, J. F.	Telephones, systems	Sept. 28, 1886
349,975	Bickford, J. H	Telephones, systems, automatic	Sept. 28, 1886
349,976	Bickford, J. H	Telephones, calls	
349,999 350,000	Jeffery, G	Magneto-electric	
350,003	Kennedy, R	do	Sept. 28, 1886 Sept. 28, 1886
350,024	Townsend, L	Telephones, systems	
350,025	Vogler, R	Motors	
350,046 $350,126$	Doubleday, H. M. and Lyman, JFrost, J. W	Lights, systems and appliances	
350,120	Hamlin, E. B	Telegraphy, fire Telephones, magnetic	Oct. 5, 1886 Oct. 5, 1886
350,140	Lane, G. M	Lights, arc, positive feed	Oct. 5, 1886
350,154	Radford, B. F	Magneto-electric	Oct. 5, 1886
350,160 $350,177$	See, J. W.——————————————————————————————————	Telephones, systems	
350,200	Humes, J. J. R	Applications, tools and machines	
350,203	Lister, J. T	Telephones, details	Oct. 5, 1886
350,215	Sargent, F. G.	Telephones, electric	Oct. 5, 1886
350,234 350,235	Edison, T. A. and Gilliland, E. T.	Telegraphy, railway-car	
350,239	Edison, T. A. and Gilliland, E. T.———Wickersham, C. H.——————————————————————————————————	Indicators	
350,293	Cox, H. B	Connectors	
350,294	Cox, H. B	Batteries, galvanic	
350,296 350,297	Desruelles, L. A. W Desruelles, L. A. W	do	
350,299	Dolbear, A. E	Telephones, electric	
350,312	Markland, W. H	Magnetic locks and bolts	Oct. 5, 1886
350,320	Robertson, J. H	Telegraphy, automatic	Oct. 5, 1886
350,355 350,365	Forsyth, C. S.——————————————————————————————————	Lights, systems and appliances	Oct. 5, 1886 Oct. 5, 1886
350,381	Meisenheimer, A	Thermostats	
350,388	Perry, N. W	Alarms	
350,411	Buck, W		
350,426 350,430	Frost, J. W. and Lake, S. D	Telegraphy, fire	
350,431	Hussey, C. A	do	Oct. 5, 1886
350,432	Hussey, C. A	do	Oct. 5, 1886
350,433 350,434		do	
350,435	Hussey, C. A	do	Oct. 5, 1886
350,445	Potter, E. B.	Heaters	Oct. 5, 1886
350,449	Tucker, C. A	Annunciators	
350,450 350,451	Tucker, C. A	AlarmsTelegraphy, fire	
350,469	Scott, D. B.	Telegraphy, printing	Oct. 5, 1886
350,482	Diehl, P.	Systems of distributiou	Oct. 12, 1886
350,515	Williams, B	Conductors, underground	Oct. 12, 1886
350,519 350,548	Morley, E. A.	Cut-outs, electro-magnetic	Oct. 12, 1886
350,610	Willis, C. F	Telephones, calls	Oct. 12, 1886
350,615	Buckingham, C. L	Telegraphy, printing	Oct. 12, 1886
350,616 350,617	Buckingham, C. L	do	Oct. 12, 1886
350,617 $350,621$	Drescher, L	Batteries, galvanic	Oct. 12, 1886
350,626	Hess, A. T. and Stoltenberg, H. A	Annunciators	Oct. 12, 1886
350,634	McCullough, L. H	Telegraphy, fire	Oct. 12, 1886
350,644 $350,648$	Whitney F P	Telegraphy, relays and soundersCut-outs, thermal	Oct. 12, 1886
350,668	Diehl. P	Motors	Oct. 12, 1886
350,676	Hering, C	Regulators	Oct. 12, 1886
350.715	Barrett, J. A	Conductors, anti-inductive	Oct. 12, 1886
350,728 350,737	Hall F I	Motors Telephones, details	Oct. 12, 1886
350,754	Loomis, O. P. and Cooley, H. W.	Regulators	Oct. 12, 1886
350,772	Roberts, G. L	Telephones, electric	Oct. 12, 1886
350,790	Wicks, P. J	Railway signals	Oct. 12, 1886
350,804	Chase, S. A	Telegraphy, fire	Oct. 12, 1886

No.	Name.	CLASS.	DATE.
350,823	Fleckinger, J	Alarms, burglar	Oct., 12, 1886
350,828	Jones, Ľ. É	Electro-magnets, machines for winding	Oct. 12, 1886
350,829	Jones, L. B	Connectors	Oct. 12, 1886
350,843	Rogers, C	Insulators Telegraphy, transmitters	
$350,882 \\ 350,945$	Herrmann, C	Separators	Oct. 12, 1886
350,954	Tesla, N	Regulators	Oct. 19, 1886
350,955	Thomson, E	Cut-outs, electro-magnetic-	Oct. 19, 1886
350,956	Thomson, E	Lights, are	Oct. 19, 1886
350,957	Thomson, E	Electro-magnets	
350,958	Thomson, E	Lights, systems and appliances	Oct. 19, 1886
350,975	Cutten, E. B Linville, J. H	Lights, are	
350,983 350,984	Linville, J. H	do	
351,075	Slocum, E. L.		
351,077	Stögermayr, F. F	Induction-coils	Oct. 19, 1886
351,099	Dowden, C. H	Annunciators	Oct. 19, 1886
351,134	Stiegelmaier, W. H		
351,148	Adams, T. E	Magneto-electric	Oct. 19, 1886
351,167	Diehl, P	do	
351,191 351,192	McCracken, E. D	do	
351,192	McCracken, E. D	Conductors, underground •	
351,209	Seiler, P.		
351,222	Thackara, S	Clocks	
351,229	Walter, H	Motors	
351,233	Watkins, H. W	Medical and surgical, body-wear	
351,239 $351,250$	Abell, J. J. and Gifford, C. B Cole, W. R	Clocks Telephones, electric	
351,256	Farmer, M. G	Electro-magnets	Oct. 19, 1886
351,257	Farmer, M, G	Telephones, relays and repeaters	
351,258	Farmer, M. G	Telephones, magnetic	Oct. 19, 1886
351,314	Delmage, W. A	Applications, tools and machines	
351,319	Gibson, J. II	Railway signals	Oct. 19, 1886
351,351	Adams, T. E Langdon-Davies, C	Regulators	Oct. 26, 1886 Oct. 26, 1886
351,367 351,369	Ferguson, A. C	Telegraphy, circuits and systems Lights, systems and appliances	Oct. 26, 1886
351,384	Le Grande, W. W	Railway signals	Oet. 26, 1886
351,388	Mather, R. H	Galvanometers	Oct. 26, 1886
351,389	Mead, C. K	Telephones, supports	Oct. 26, 1886
351,408	Stern, P. K	Alarms, burglar	Oct. 26, 1886
351,419	Woolley, L. G Biggs, J. M	Valve-controllers Keys	
351,485 351,488	Bowyer, J. M	Circuit-closers	
351,524	Phelps, L. J	Telegraphy, railway-car	
351,525	Phelps, L. J.	do	
351,544	Walter, H. E.	Magneto-electric	
351,569	Berliner, E	Telephones, electric	
351,588	Gaulard, L. and Gibbs, J. D		
351,589 351,597	Heissler, N. C.	Systems of distribution Telephones, calls	Oct. 26, 1886
351,599	Henzel, C	Annunciators	Oct. 26, 1886
351,600	Henzel, C. and Wood, W	Magnetic locks and bolts	Oct. 26, 1886
351,601	Hill, W. S	Lights, are	Oct. 26, 1886
351,602		Batteries, galvanic	
351,611 351,650	Park H S	Conductors ————————————————————————————————————	Oct. 26, 1886 Oct. 26, 1886
351,681	Wilson, J. C	Recorders	Oct. 26, 1886
351,697		Conductors, underground	Oct. 26, 1886
351,699	Houghton, E. J. and Collet, T. M.	Regulators	Oet. 26, 1886
351,702	Johnson, W. S	Thermostats	Oct. 26, 1886
351,704	Knudson, A. A		
351,719		Thermostats	
351,746 351,759	Derrick, F. E. and Brott, S. C. Graver, E. S.		Nov. 2, 1886 Nov. 2, 1886
351,772	Hoffman, J. W		Nov. 2, 1886
351,813	Stites, G	Lightning-rods	Nov. 2, 1886
351,834	Jenkins, M. R	Kevs	Nov. 2, 1886
351,855	Edison, T. A	Lights, incandescent	Nov. 2, 1886
351,856	Edison, T. A	do	Nov. 2, 1886
351,869 351,902	Eickemeyer R.	Magneto-electric	Nov. 2, 1886
351,902	Eiekemeyer, R	do	Nov. 2, 1886
351,904	Eickemeyer, R	do	Nov. 2. 1886
351,905	Eickemeyer, R	Telephones, magnetic	Nov. 2, 1886
351,906	Eickemeyer, R	Magneto-electric	Nov. 2, 1886
351,907	Eickemeyer, K	do	Nov. 2, 1886

NUMERICAL INDEX—ELECTRICITY.

No.	Name.	CLASS.	DATE.
351,913	Haddock, W	Conductors, underground	Nov. 2, 1886
351,933	Moffatt, J. M. and Blakeney, E	Telegraphy, quadruplex	Nov. 2, 1886
351,961	Brush, C. F	Regulators	
351,973 352,006	Gifford, A. T	Lights, areLights, sockets and keys	Nov. 2, 1886 Nov. 2, 1886
352,000	Schaefer, F	do	Nov. 2, 1886
352,035	Brown, H. P	Cut-outs, electro-magnetic	Nov. 2, 1886
352,043	Cox, H. B	Circuit-closers	Nov. 2, 1886
352,044	Cox, H. B.	Valve-controllers	Nov. 2, 1886
352,059 352,070	Kaler, W. A	Telegraphy, printingApplications, tools and machines	
352,074	Van Depoele, C. J	Magneto-electric	Nov. 2, 1886
352,084	Drescher, L	Induction-coils	
352,086	Ennis, H. J	Indicators	
352,105 352,119	Zipernowsky, K., Déri, M., and Bláthy, O. P. Collins, W. H	Induction-coils Telephones, electric	
352,143	Munson, J. E	Telegraphy, printing	Nov. 9, 1886
352,154	Rousseau, D.	Magnetic locks and bolts	Nov. 9, 1886
352,167	Van Depoele, C. J	Car brakes	
352,176	Bonta, J. WBonta, J. W	Telephones, electric	
352,177 352,178	Bonta, J. W		
352,179	Bonta, J. W.	do	
352,203	Reichling, R		
352,234	Ries, E. E	Magueto-electric	
352,265 352,317	Haskins, C. D		Nov. 9, 1886 Nov. 9, 1886
352,320	Hedge, J. F., jr	Clocks	
352,324	Hoffman, J. W	Batteries, galvanie	Nov. 9, 1886
352,342	Mingle, G. W. and Brown, W. T	Cut-outs, thermal	Nov. 9, 1886
352,374 352,407	Tilden, J. A	Steering and propulsion	
352,412	James, De W. C	Railway signals	
352,435	Wilson, J. C	Telegraphy, printing	
352,436	Winton, H. D	Insulators	
352,437	Winton, H. D	do	
352,442 352,445	Bulen, G. F.——————————————————————————————————	Thermostats	
352,472	Lüngen, A	Bells	
352,473	Lüngen, A	Igniting devices	Nov. 9, 1886
352,474	Lüngen, A	Telephones, switches	Nov. 9, 1886
352,486 352,504	Patterson, W. R. Butler, J. W.	Batteries, galvanicConductors, underground	Nov. 9, 1886 Nov. 9, 1886
352,549	Le Grande, W. W. aud Burton, G. W	Transmitters	Nov. 16, 1886
352,571	Pridham, C. W	Railway signals	Nov. 16, 1886
352,577	Shaver, G. F	Telephones, mechanical	Nov. 16, 1886
352,590 352,596	Toulmin, M Wilson, G. W	Railway signals Telephones, systems	Nov. 16, 1886 Nov. 16, 1886
352,600	Wright, C. G	Telegraphy, perforating	Nov. 16, 1886
352,621	Lemp, H. and Wightman, M. J.	Cut-outs, thermal	Nov. 16, 1886
352,622	Lemp, H. and Wightman, M. J.	do	Nov. 16, 1886
352,625	Lyman, D. and Wheeler, M.	Lights, incandescent————————————————————————————————————	Nov. 16, 1886
352,645 352,647	Gaynor, T. F Ghegan, J. J		Nov. 16, 1886
352,691	Howell, J. W	Systems of distribution	Nov. 16, 1886
352,700	Mahanay, S. C. and Campbell, B. L.	Railway signals	Nov. 16, 1886
352,708	Moses, O. A.	Batteries, secondary	Nov. 16, 1886 Nov. 16, 1886
352,725 352,735	Westinghouse, G., jr	Relays and sounders————————————————————————————————————	Nov. 16, 1886
352,754	Hurlbut, S. E	Conductors, underground	Nov. 16, 1886
352,771	Morehouse, H. G	do	Nov. 16, 1886
352,796	Baldwin, C. W	Applications, tools and machines	Nov. 16, 1886
352,806 352,852	Cole, W. R.——————————————————————————————————		Nov. 16, 1886
352,861	Dowden, C. H	Alarms, burglar	Nov. 16, 1886
352,865	Freir, S. P	Telegraphy, quadruplex	Nov. 16, 1886
352,874	Johnson, W. S	Thermostats	Nov. 16, 1886
352,877 352,900	Wholese M and Dardon I D	Batteries, galvanicTelephones, electric	Nov. 16, 1886
352,900 352,903	Le Grande, W. W	Railway signals	Nov. 16, 1886
352,948	Glover, L. S.	Telephones, calls	Nov. 23, 1886
353,003	Recordon, E	Motors	Nov. 23, 1886
353,035	Howell, J. W	Magneto-electric	Nov. 23, 1886 Nov. 23, 1886
353,086 353,120	Shaw, E. S.——————————————————————————————————		Nov. 23, 1886
353,123	Clark, J. H	Applications, tools and machines	Nov. 23, 1886
353,128	Field, S. D	Telegraphy, dynamo	Nov. 23, 1886

Magneto-electric Nov. 23, 33, 161 Mathor, R. H Magneto-electric Nov. 23, 33, 162 Schmid, A Magneto-electric Nov. 23, 33, 173 Thomson, E Regulators Nov. 23, 33, 173 Thomson, E Regulators Nov. 23, 33, 181 Whirle, J. H Telophones, switch-boards Nov. 23, 33, 181 Whirle, J. H Telophones, switch-boards Nov. 23, 33, 273 Tacker, C. A and Markland, W. H Batteries, secondary Nov. 23, 33, 273 Tacker, C. A and Markland, W. H Bells Nov. 23, 33, 273 Tacker, C. A and Huebel, O. H Nov. 23, 33, 273 Tacker, C. A and Huebel, O. H Nov. 23, 33, 273 Tacker, C. A and Huebel, O. H Nov. 23, 33, 274 Tacher, C. A and Lorenz, R. O Lights, arc Nov. 30, 33, 330 Keith, N. S Nov. 24, 24, 24, 24, 24, 24, 24, 24, 24, 24,				
Sign 12 Knowles E. R	No.	NAME.	CLASS.	DATE.
Sign 12 Nowles E. R	079.141	Kondall I A	Pattories calvanie	Nov 92 1996
1935 15 Mather, R. H. Magneto-electrie Nov. 23, 33, 15 Reinmann, A. L. Lights, incandescent. Nov. 23, 33, 16 Schmid, A. Magneto-electrie Nov. 23, 33, 16 Schmid, A. Magneto-electrie Nov. 23, 33, 17 Thomson, B. Regulators Nov. 23, 33, 18 White, J. H. Regulators Nov. 23, 33, 18 White, J. H. Regulators Nov. 23, 33, 18 Michel, J. H. Regulators Nov. 23, 33, 18 Refer, T. H. and Geary, J. Magnetic locks and boils. Nov. 23, 33, 32 Jingen, A. Magnetic locks and boils. Nov. 23, 35, 252 Jingen, A. Magnetic locks and boils. Nov. 23, 35, 253 Very C. A. and Huebel, O. H. Refer, C. A. Refer, C. A				Nov. 23, 1886
153,158 Reinman, A. I. Lights, incaudescent Nov. 23, 33,179 Thomson, E. Regulators Nov. 23, 33,119 Thomson, E. A. Magneto-electric Nov. 23, 33,119 Thomson, E. A. Magneto-electric Nov. 23, 33,119 Wehrle, J. H. Telephones, switch-boards Nov. 23, 33,119 Thomson, E. Telephones, switch-boards Nov. 23, 33,119 Thomson, E. Telephones, electric Nov. 23, 33,110 Thomson, E. Telephones, electric Nov. 30, 33,333 Thomson, E. Telephones, electric Nov. 30, 33,333 Thomson, E. Telephones, electric Nov. 30, 33,333 Telephones, electric Nov. 30, 30, 333,334 Telephones, electric Nov. 30, 33,335 Telephones, electric Nov. 30, 33,336 Telephones, electric Nov. 30, 30, 333,337 Telephones, electric Nov. 30, 33,333 Telephones, electric Nov. 30, 33,344 Telephones, electric Nov. 30, 30, 333,449 Telephones, electric Nov. 30, 33,449 Telephones,				Nov. 23, 1886
Say 119		Reinmann, A. L	Lights, incandescent	Nov. 23, 1886
353,180 Thomson, E			Magneto-electric	Nov. 23, 1886
353,144 Wehrle, J. H.				Nov. 23, 1886
Sa5,263 Lingen, A				
353,293 Jaingen, A				Nov. 23, 1886
353,273 Tucker, C. A. and Markland, W.H. Bells Nov. 23, 33,274 Tucker, C. A. and Huebel, O. H. do. Nov. 23, 33,274 Tucker, C. A. and Huebel, O. H. do. Nov. 23, 33,235 Nov. 23, 35,236 Henneberg, H. and Lorenz, R. O. Lights, arc Nov. 30, 353,331 Nov. 20, 23, 353,331 Nov. 20, 23, 353,332 Nov. 20, 23, 353,333 Nov. 20, 23, 353,335 Nov. 20, 23, 353,335 Nov. 20, 23, 353,336 Nov. 20, 23, 353,337 Nov. 20, 23, 353,338 Nov. 20, 23, 353,339 Nov. 20, 23, 353,330 Nov. 20, 23, 353,331 N				Nov. 23, 1886
333,228	353,269	Parker, T. H. and Geary, J		Nov. 23, 1886
353,385 Conklin, J. I., ir	353,273			Nov. 23, 1886
Sasage	353,274			
353,310 Keith, N. S. Magneto-electrie Nov. 30, 353,334 Van Depoele, C. J Lights, incandescent Nov. 30, 353,335 Van Depoele, C. J Cut-outs, electro-magnetic Nov. 30, 353,337 Van Depoele, C. J Lights, incandescent Nov. 30, 353,337 Van Depoele, C. J Lights, incandescent Nov. 30, 353,337 Van Depoele, C. J Lights, incandescent Nov. 30, 353,337 Van Depoele, C. J Locomotion Nov. 30, 353,349 Baldwin, C. E Medical and surgical, body-wear Nov. 30, 353,349 Buell, C. E Lights, systems and appliances Nov. 30, 353,349 Nov. 30, 353,340 Nov. 30, 353,340 Nov. 30, 353,340 Nov. 30, 353,341 Nov. 30, 353,341 Nov. 30, 353,440 Nov. 30, 353,44		Hannahara H and Lorenz R O		
353,333				Nov. 30, 1886
353,334	353,333			Nov: 30, 1886
353,337 Wallace, T. and En Holm, O. A		Van Depoele, C. J		Nov. 30, 1886
353,346 Baldwin, C. E. Medical and surgical, body-wear Nov. 30, 353,349 Buell, C. E. Lights, systems and appliances Nov. 30, 353,360 Carty, J. J. Telephones, systems Nov. 30, 353,361 Carty, J. J. Telephones, systems Nov. 30, 353,363 Williams, T. D., Eitemiller, G. M., and Lucock, J. S. S. Applications, general Nov. 30, 353,410 Cerest, M. Telephones, mechanical Nov. 30, 353,453 Surmley, W. Telephones, secondary Nov. 30, 353,561 Cowper, E. A. Telegraphy, automatic Nov. 30, 353,561 Cackersteen, M. H. Applications, general Nov. 30, 353,563 Cack	353,335	Van Depoele, C. J		Nov. 30, 1886
353,349 Buell, C. E.	353,337			Nov. 30, 1886
353,530				Nov. 30, 1886 Nov. 30, 1886
Regulators				Nov. 30, 1886
Sais Williams T. D., Eitemiller, G. M., and Lucock, J. S. Lucock, J. S. Applications, general Nov. 30, 353,418 Gerst, M. Telephones, mechanical Nov. 30, 353,513 Sorley, C. Batteries, secondary Nov. 30, 353,513 Sorley, C. Batteries, secondary Nov. 30, 353,536 Burnley, W. Telephones, electric Nov. 30, 353,541 Cowper, E. A. Telegraphy, automatic Nov. 30, 353,536 Lackersteen, M. H. Applications, general Nov. 30, 353,536 Lackersteen, M. H. Applications, general Nov. 30, 353,539 Robertson, J. H. Telegraphy, automatic Nov. 30, 353,539 Robertson, J. H. Telegraphy, automatic Nov. 30, 353,538 Stanley, W., jr. Cl. Collegraphy, automatic Nov. 30, 353,538 Stanley, W., jr. Cl. Collegraphy, automatic Nov. 30, 353,638 Stanley, W., jr. Cl. Collegraphy, automatic Nov. 30, 353,638 Stanley, W., jr. Cl. Collegraphy, automatic Nov. 30, 353,638 Stanley, W., jr. Cl. Collegraphy, automatic Nov. 30, 353,637 Likly, H., Carpenter, C. A., and Graves, F. B. Thermostats Nov. 30, 353,639 No	353,367			Nov. 30, 1886
Lucock, J. S. Applications, general Nov. 30, 353,494 Coerper, C Magneto-electric Nov. 30, 353,495 Gerst, M Telephones, mechanical Nov. 30, 353,450 Burnley, W Telephones, electric Nov. 30, 353,540 Burnley, W Telephones, electric Nov. 30, 353,540 Burnley, W Telephones, electric Nov. 30, 353,560 Lackersteen, M. H Applications, general Nov. 30, 353,560 Lackersteen, M. H Telegraphy, automatic Nov. 30, 353,560 Lackersteen, M. H Telegraphy, automatic Nov. 30, 353,593 Robertson, J. H Telegraphy, automatic Nov. 30, 353,593 Robertson, J. H do Nov. 30, 353,593 Stanley, W. jr. Cu-outs, mechanical Nov. 30, 353,693 Stanley, W. jr. Cu-outs, mechanical Nov. 30, 353,643 Stanley, W. jr. Cu-outs, mechanical Nov. 30, 353,643 Nov. 30, 400 Nov. 30, 353,644 Nov. 30, 400 Nov. 30, 353,645 Nov. 30, 400 Nov. 30, 353,648 Nov. 30, 400 Nov. 30, 353,649 Nov. 30, 400 Nov. 30, 353,649 Nov. 30, 400 Nov. 30, 353,649 Nov. 30, 400 Nov. 30, 353,653 Nov. 30, 400		Williams, T. D., Eitemiller, G. M., and		Nov. 30, 1886
S53,414 Coerper, C			Applications against	Non-20-1000
Sosley Gerst, M			Applications, general	Nov. 30, 1886
Sozie Sozi			Telephones mechanical	Nov. 30, 1886
Burnley W				
S55,566			***	
Robertson, J. H			Telegraphy, automatic	Nov. 30, 1886
S53,594 Robertson, J. II		Lackersteen, M. H	Applications, general	Nov. 30, 1886
S53,594 Robertson, J. II		Robertson, J. H		
S53,598 Shaw, E				
Stanley, W., jr. Cut-outs, mechanical Nov. 30, 353,637 Likly, H., Carpenter, C. A., and Graves, F. B. Lights, arc, gravity feed, frictional Nov. 30, 353,649 Waddell, M. Galvanometers Nov. 30, 353,653 Van Depoele, C. J. Conductors Nov. 30, 353,683 Joues, J. S. Telephones, mechanical Dec. 7, 353,684 Jones, J. S. Telephones, mechanical Dec. 7, 353,684 Jones, J. S. Telephones, electric Dec. 7, 353,755 Palmer, N. F. Telegraphy, transmitters Dec. 7, 353,755 Palmer, N. F. Telephones, electric Dec. 7, 353,785 Edison, T. A Lights, incaudescent Dec. 7, 353,788 Edison, T. A Lights, incaudescent Dec. 7, 353,789 Edison, T. A Lights, incaudescent Dec. 7, 353,827 Smith, H. J. Magneto-electro, hand-machines Dec. 7, 353,880 Park, H. S Clocks Dec. 7, 353,986 Park, H. S Clocks Dec. 7, 353,986 Park, H. S Clocks Dec. 7, 353,986 Sperry, E. A Regulators Dec. 7, 353,988 Sperry, E. A Regulators Dec. 7, 353,989 Sperry, E. A Regulators Dec. 7, 354,400 Wirsching, A Telegraphy, printing Dec. 7, 354,411 Edgerton, N. H Motors Dec. 7, 354,413 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,439 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders				
S53,649 Valdell, M	353,603		Cut-outs, mechanical	Nov. 30, 1886
353,649				
Sas, 3653 Van Depoele, C. J				
Telephones, mechanical Dec. 7,				
353,684 Jones, J. S				
Shryock, J. W	353,684		do	Dec. 7, 1886
353,755 Palmer, N. F.		McDonough, J. W	Telephones, electric	
Batteries, galvanie Dec. 7,		Shryock, J. W	Telegraphy, transmitters	
Thompson, A. aud Ritchie, R. O		Partz A F W	Ratteries calvanie	
353,783 Edison, T. A				Dec. 7, 1886
353,797 Marshall, J. H Batteries, secondary, applications Dec. 7, 353,827 353,827 Smith, H. J Magneto-electro, hand-machines Dec. 7, 2, 353,829 353,829 Sprague, F. J Locomotion Dec. 7, 2, 353,880 Bailey, J. S Clocks Dec. 7, 2, 353,915 Bradley, C. S Galvanometers Dec. 7, 2, 353,940 Hayes, H. V Telephones, systems Dec. 7, 2, 353,986 Sperry, E. A Regulators Dec. 7, 2, 353,987 Sperry, E. A Motors Dec. 7, 353,987 353,988 Sperry, E. A Magneto-electric Dec. 7, 353,990 Sperry, E. A Magneto-electric Dec. 7, 354,001 Wirsching, A Telegrapby, printing Dec. 7, 354,111 Edgerton, N. H Motors Dec. 7, 354,131 Guion, R. L Thermostats Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14, 354,139		Edison, T. A	Lights, incaudescent	Dec. 7, 1886
353,827 Smith, H. J.		Ives, E. B	Telegraphy, railway-car	Dec. 7, 1886
353,829 Sprague, F. J Locomotion Dec. 7, 353,840 Bailey, J. S Clocks Dec. 7, 353,880 Park, H. S Car-brakes Dec. 7, 353,915 Bradley, C. S Galvanometers Dec. 7, 353,940 Hayes, H. V Telephones, systems Dec. 7, 353,984 Smith, W. F Connectors Dec. 7, 353,986 Sperry, E. A Regulators Dec. 7, 353,987 Sperry, E. A Motors Dec. 7, 353,989 Sperry, E. A Magneto-electric Dec. 7, 353,990 Sperry, E. A Regulators Dec. 7, 354,001 Wirsching, A Telegraphy, printing Dec. 7, 354,111 Edgerton, N. H Motors Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14,		Marshall, J. H	Batteries, secondary, applications	Dec. 7, 1886
Bailey, J. S				
353,880 Park, H. S. Car-brakes Dec. 7, 353,915 Bradley, C. S. Galvanometers Dec. 7, 353,940 Hayes, H. V. Telephones, systems Dec. 7, 353,984 Smith, W. F. Connectors Dec. 7, 353,986 Sperry, E. A Regulators Dec. 7, 353,987 Sperry, E. A Motors Dec. 7, 353,989 Sperry, E. A Magneto-electric Dec. 7, 353,990 Sperry, E. A Regulators Dec. 7, 354,001 Wirsching, A Telegrapby, printing Dec. 7, 354,111 Edgerton, N. H Motors Dec. 14, 354,131 Guion, R. L Thermostats Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14,				
353,915 Bradley, C. S Galvanometers Dec. 7, 353,940 Hayes, H. V Telephones, systems Dec. 7, 353,984 Smith, W. F Connectors Dec. 7, 353,986 Sperry, E. A Regulators Dec. 7, 353,987 Sperry, E. A Motors Dec. 7, 353,988 Sperry, E. A Magneto-electric Dec. 7, 353,990 Sperry, E. A Magneto-electric Dec. 7, 354,001 Wirsching, A Telegrapby, printing Dec. 7, 354,111 Edgerton, N. H Motors Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14, Relays and sounders Dec. 14, Dec. 14,				Dec. 7, 1886
353,984 Smith, W. F. Connectors Dec. 7, 353,986 Sperry, E. A Regulators Dec. 7, 353,987 Sperry, E. A Motors Dec. 7, 353,988 Sperry, E. A Regulators Dec. 7, 353,989 Sperry, E. A Magneto-electric Dec. 7, 354,001 Wirsching, A Regulators Dec. 7, 354,111 Edgerton, N. H Motors Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14, Relays and sounders Dec. 14,	353,915			
Sperry, E. A Regulators Dec. 7,		Hayes, H. V	Connectors	Dec. 7, 1886
353,987 Sperry, E. A Motors Dec. 7,				
353,988 Sperry, E. A Regulators Dec. 7, 353,989 Sperry, E. A Magneto-electric Dec. 7, 353,990 Sperry, E. A Regulators Dec. 7, 354,001 Wirsching, A Telegrapby, printing Dec. 7, 354,111 Edgerton, N. H Motors Dec. 14, 354,131 Guion, R. L Thermostats Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14,				
353,989 Sperry, E. A Magneto-electric Dec. 7, 353,990 Sperry, E. A Regulators Dec. 7, 354,001 Wirsching, A Telegraphy, printing Dec. 7, 354,111 Edgerton, N. H Motors Dec. 14, 354,131 Guion, R. L Thermostats Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14,				
354,001 Wirsching, A Telegrapby, printing Dec. 7, 354,111 Edgerton, N. H Motors Dec. 14, 354,131 Guion, R. L Thermostats Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14,	353,989	Sperry, E. A	Magneto-electric	Dec. 7, 1886
354,111 Edgerton, N. H Motors Dec. 14, 354,131 Guion, R. L Thermostats Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14,				
354,131 Gulon, R. L Thermostats Dec. 14, 354,139 House, H. A. and H. A., jr Relays and sounders Dec. 14,				
354,139 House, H. A. and H. A., jr				
		House, H. A. and H. A., jr		
	354,169	Morton, W. J	Telephoues, magnetic	Dec. 14, 1886
				Dec. 14, 1886 Dec. 14, 1886
354,258 Slattery, M. M. M		Slattery, M. M. M	Lights, systems and appliances	
354,272 Thomson, E. Batteries, secondary Dec. 14,	354,272	Thomson, E.	Batteries, secondary	Dec. 14, 1886
354,273 Thomson, E		Thomson, E	Regulators	Dec. 14, 1886
354,274 Thomson, E Induction-coils Dec. 14,	554,274	Thomson, F	THUUCHON-COHS	Dec. 14, 1880

NUMERICAL INDEX—ELECTRICITY.

No.	Name.	CLASS.	DATE.
354,290	Williams, B	Conductors, underground	Dec. 14, 1886
354.291	Williamson, D	Lights, systems and appliances	Dec. 14, 1886
354,292	Williamson, D	Magneto-electric	Dec. 14, 1886
354,302	Carpenter, G. E. and Tucker, A. F	Telegraphy, railway-car	Dec. 14, 1886
354,310 354,320	Edison, T. A Johnson, E. H	Lights, filaments and carbons————————————————————————————————————	Dec. 14, 1886 Dec. 14, 1886
354,342	Pratt, C. C	Lightning-rods	
354,350	Samuel, E	Locomotion	Dec. 14, 1886
354,352	Sass, V. and Friederich, K	Batteries, secondary	Dec. 14, 1886
354,402	Eichmeyer, J. C	Telephones, magnetic	Dec. 14, 1886 Dec. 14, 1886
354,434 354,460	O'Keenan, C. E	Batteries, galvanic Telegraphy, railway-car	Dec. 14, 1886
354,466	Eschwei, C	Cut-outs, thermal	Dec. 14, 1886
354,469	Gould, C. C	Telephones, systems	Dec. 14, 1886
354,505	Cull, W. J. and Scattergood, C. F	Annunciators	Dec. 14, 1886
354,508 354,525	Fraleigh, S Himmer, V	Alarms	Dec. 14, 1886 Dec. 14, 1886
354,530	Boissier, H. R	Lights, arc, gravity feed, gear	Dec. 21, 1886
354,538	Curtis, C. G. and Crocker, F. B	Magneto-electric	Dec. 21, 1886
354,539	Curtis, C. G. and Wheeler, S. S	do	Dec. 21, 1886
354,541	Drawbaugh, D	Telephones, electric	Dec. 21, 1886
354,542 354,588	Wheeler, S. S. and Curtis, C. G	Magneto-electric	Dec. 21, 1886 Dec. 21, 1886
354,606	Mather, R. H	Regulators	
354,637	Hart, G. W		
354,639	Jenney, C. D	Lights, are	
354,758 354,759	Adams, J. S.	Lights, systems and appliancesdodo	
354,760	Adams, J. S	do	
354,761	Anderson, A	Telegraphy, fire	Dec. 21, 1886
354,781	Gordon, J. E. H	Lights, systems and appliancesdo	
354,782 354,783	Gordon, J. E. H	Systems of distribution	
354,788	Hickley, A. S	Lights, incandescent	
354,791	Irwin, J. H	Magneto-electric	
354,793 354,814	Knight, W. H.	Keys	
354,815	Steiner, J	Relays and sounders	
354,818	Voelker, W. L	Telephones, details	Dec. 21, 1886
354,827	Burton, G. D	Telegraphy, railway-car	
354,838 354,847	Walter, W. C.	Applications, generalCut-outs, thermal	Dec. 21, 1886
354,853	Cabell, S. G	Applications, general	Dec. 21, 1886
354,856	Frost, J. W	Telegraphy, fire	Dec. 21, 1886
354,858 354,881	Geary, J Bain, F	Alarms, burglarApplications, tools and machines	Dec. 21, 1886 Dec. 28, 1886
354,892	Du Bois, J. S	Conductors, underground	Dec. 28, 1886
354,919	Manny, W. B	Circuit-closers	Dec. 28, 1886
354,923	Mindeleff, D	Separators	Dec. 28, 1886
354,932 354,942	Price, F. AShaver, G. F	Thermostats	Dec. 28, 1886 Dec. 28, 1886
354,945	Sperry, E. A	Magneto-electric	
354,946	Sperry, E. A	do	Dec. 28, 1886
354,965 354,992	Black, C. S. and Pfister, P. C.	ThermostatsRailway signals	
354,996	Absterdam, J		
355,024	Paine, H. M.	Motors	Dec. 28, 1886
355,032	Schneekloth, H. A	Telephones, magnetic	Dec. 28, 1886
355,055 355,059	Charles J. H	Telegraphy, railway-car Medical and surgical, body-wear	Dec. 28, 1886
355,063	Crocker, F. B	Conductors, underground	Dec. 28, 1886
355,129	Brady, J	Lights, are	Dec. 28, 1886
355,149	Dolbear, A. E	Telephones, electric	Dec. 28, 1886
355,164 355,165	Guion, R. L.——————————————————————————————————	Thermostats	Dec. 28, 1886
355,172	Jones, R. F	Lights, arc, gravity feed, frictional	Dec. 28, 1886
355,189	McLaughlin, J. F	Telephones, systems	Dec. 28, 1886
355,190 355,226	McLaughlin, J. F	do	
355,330	Smith, D. J. and Sinclair, D Locke, S. D		
355,363	Weinhaus, T. H	Telephones, mechanical	Jan. 4, 1887
355,380	Carpenter, G. A	Connectors	Jan. 4, 1887
355,382 355,383	Chinnock, C. E	IndicatorsTelephones, calls	Jan. 4, 1887 Jan. 4, 1887
355,384	Chinnock, C. E	Alarms	Jan. 4, 1887
355,400	Keeler, T. B	Lights, systems and appliances	Jan. 4, 1887
355,412	Quinby, W. C.	Batteries, galvanic	Jan. 4, 1887

355,420 355,423 355,424 355,425 355,426 355,426 355,431 355,431 355,448 355,448 355,469 355,469 355,491 355,492 355,491 355,491 355,492 355,493 355,665 356,662 355,665 356,662 355,662 355,662 355,663 355,671 355,714 355,738 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,739 355,734 355,744 355,744 355,744 355,745 355,744 355,746	Connectors Jan. 4, 1887 Telephones, magnetic Jan. 4, 1887 Telephones, switch-boards Jan. 4, 1887 Telephones, electric Jan. 4, 1887 Telegraphy, relays and sounders Jan. 4, 1887 A. E. G Clocks Jan. 4, 1887 Lights, systems and appliances Jan. 4, 1887 — do Jan. 4, 1887
355,423 Watkins, F. C Watkins,	Connectors Jan. 4, 1887 Telephones, magnetic Jan. 4, 1887 Telephones, switch-boards Jan. 4, 1887 Telephones, electric Jan. 4, 1887 Telegraphy, relays and sounders Jan. 4, 1887 A. E. G Clocks Jan. 4, 1887 Lights, systems and appliances Jan. 4, 1887 — do Jan. 4, 1887
355,424 Watkins, F. C	Telephones, switch-boards Jan. 4, 1887 Telephones, electric Jan. 4, 1887 Telegraphy, relays and sounders Jan. 4, 1887 Jan. 4, 1887 Lights, systems and appliances Jan. 4, 1887 Lights, systems and appliances Jan. 4, 1887 ——————————————————————————————————
355,426 Watkins, F. C. 355,431 Arthur, W. 355,443 Broich, J. and Luebke, 355,446 Edwards, H. F. 355,469 Phelps, L. J. 355,491 Wiley, G. L. 355,492 Wiley, G. L. 355,493 Wiley, G. L. 355,662 Pike, D. E. 355,662 Pike, D. E. 355,685 Egan, C. E. 355,714 Reinmann, A. I. 355,739 Williamson, D. 355,742 Wittenberg, C. 355,742 Wittenberg, C. 355,746 Wittenberg, C. 355,753 Bardonnaut, P. E.	Telephones, electric
355,431 Arthur, W 355,434 Broich, J. and Luebke, 355,446 Edwards, H. F 355,469 Phelps, L. J 355,470 Phelps, L. J 355,491 Wiley, G. L 355,492 Wiley, G. L 355,548 Meyer, A 355,611 Howson, H 355,685 Egan, C. E 355,686 Egan, C. E 355,687 Egan, C. E 355,739 Wiley, G. L 355,739 Willamson, D 355,739 Willamson, D 355,741 Wittenberg, C 355,742 Wittenberg, C 355,744 Wittenberg, C 355,746 Wittenberg, C 355,753 Bardonnaut, P. E	Telegraphy, relays and sounders Jan. 4, 1887 Clocks Jan. 4, 1887 Lights, systems and appliances Jan. 4, 1887 ——————————————————————————————————
355,434 Broich, J. and Luebke, 355,446 Edwards, H. F	Clocks
355,443 Edwards, H. F. 355,446 Greenfield, E. T. 355,469 Phelps, L. J. 355,470 Phelps, L. J. 355,491 Wiley, G. L. 355,492 Wiley, G. L. 355,548 Meyer, A. 355,611 Howson, H. 355,655 Munson, A. J. 355,686 Egan, C. E. 355,687 Egan, C. E. 355,687 Egan, C. E. 355,734 Wiley, G. L. 355,739 Wiley, G. L. 355,739 Wiley, G. L. 355,740 Wittenberg, C. 355,741 Wittenberg, C. 355,742 Wittenberg, C. 355,744 Wittenberg, C. 355,745 Wittenberg, C. 355,746 Wittenberg, C. 355,753 Bardonnaut, P. E.	Lights, systems and appliances Jan. 4, 1887 — do Jan. 4, 1887 — Telegraphy, fire Jan. 4, 1887 — Connectors Jan. 4, 1887 — Lightning-rods Jan. 4, 1887 — Telegraphy, printing Jan. 4, 1887 — Telephones, magnetic Jan. 11, 1887 — Telephones, magnetic Jan. 11, 1887 — Telephones, magnetic Jan. 11, 1887 — Lights, incandescent Jan. 11, 1887 — Regulators Jan. 11, 1887 — Telephones, magnetic Jan. 11, 1887 — Telephones, magnetic Jan. 11, 1887 — Telephones, systems Jan. 1
355,468 Phelps, L. J. 355,469 Phelps, L. J. 355,470 Phelps, L. J. 355,491 Wiley, G. L. 355,493 Wiley, G. L. 355,548 Meyer, A. 355,661 Howson, H. 355,662 Pike, D. E. 355,685 Egan, C. E. 355,686 Egan, C. E. 355,784 Reinmann, A. I. 355,739 Williamson, D. 355,739 Williamson, D. 355,741 Wittenberg, C. 355,742 Wittenberg, C. 355,744 Wittenberg, C. 355,745 Wittenberg, C. 355,746 Wittenberg, C. 355,746 Wittenberg, C. 355,753 Wittenberg, C. 355,746 Wittenberg, C. 355,747 Wittenberg, C. 355,748 Wittenberg, C. 355,749 Wittenberg, C. 355,740 Wittenberg, C. 355,741 Wittenberg, C. 355,745 Wittenberg, C. 355,746 Wittenberg, C. 355,753 Bardonnaut, P. E.	do
355,469 Phelps, L. J. 355,470 Phelps, L. J. 355,491 Wiley, G. L. 355,492 Wiley, G. L. 355,493 Wiley, G. L. 355,548 Meyer, A 355,661 Howson, H. 355,685 Egan, C. E. 355,686 Egan, C. E. 355,729 Egan, C. E. 355,734 Waite, H. E. 355,739 Williamson, D. 355,742 Wittenberg, C. 355,743 Wittenberg, C. 355,744 Wittenberg, C. 355,745 Wittenberg, C. 355,746 Wittenberg, C. 355,753 Bardonnaut, P. E.	
355,470 Phelps, L. J. 355,491 Wiley, G. L. 355,492 Wiley, G. L. 355,548 Meyer, A. 355,611 Howson, H. 355,655 Munson, A. J. 355,686 Egan, C. E. 355,686 Egan, C. E. 355,687 Egan, C. E. 355,714 Reinmann, A. L. 355,734 Waite, H. E. 355,738 Williamson, D. 355,739 Wilmarth, F. H. 355,741 Wittenberg, C. 355,742 Wittenberg, C. 355,744 Wittenberg, C. 355,745 Wittenberg, C. 355,746 Wittenberg, C. 355,746 Wittenberg, C. 355,753 Bardonnaut, P. E.	
355,491 Wiley, G. L	Conductors Jan. 4, 1887 do Jan. 4, 1887 do Jan. 4, 1887 Telegraphy, fire Jan. 4, 1887 Connectors Jan. 4, 1887 Lightning-rods Jan. 4, 1887 Telegraphy, printing Jan. 1, 1887 Telephones, magnetic Jan. 11, 1887 Telephones, magnetic Jan. 11, 1887 Lights, incandescent Jan. 11, 1887 Regulators Jan. 11, 1887 Telephones, magnetic Jan. 11, 1887 Magneto-electric Jan. 11, 1887 Cut-outs, electro-magnetic Jan. 11, 1887 Telephones, systems Jan. 11, 1887 Telephones, systems Jan. 11, 1887 Jan. 11, 1887 Jan. 11, 1887 Jan. 11, 1887
355,492 Wiley, G. L. 355,493 Wiley, G. L. 355,493 Meyer, A. 355,611 Howson, H. 355,655 Munson, A. J. 355,685 Egan, C. E. 355,686 Egan, C. E. 355,714 Reinmann, A. L. 355,739 Stevens, W. L. 355,738 Williamson, D. 355,739 Williamson, D. 355,741 Wittenberg, C. 355,742 Wittenberg, C. 355,744 Wittenberg, C. 355,745 Wittenberg, C. 355,746 Wittenberg, C. 355,746 Wittenberg, C. 355,746 Wittenberg, C. 355,747 Wittenberg, C. 355,748 Bardonnaut, P. E.	
355,493 Wiley, G. L	
355,611 Howson, H. 355,655 Munson, A. J. 355,662 Pike, D. E. 355,686 Egan, C. E. 355,687 Egan, C. E. 355,714 Reinmann, A. L. 355,739 Williamson, D. 355,739 Williamson, D. 355,739 Williamson, D. 355,740 Wittenberg, C. 355,741 Wittenberg, C. 355,742 Wittenberg, C. 355,745 Wittenberg, C. 355,746 Wittenberg, C. 355,746 Wittenberg, C. 355,753 Bardonnaut, P. E.	Connectors Jan. 4, 1887 Lightning-rods Jan. 4, 1887 Telegraphy, printing Jan. 1, 1887 Telephones, magnetic Jan. 11, 1887 Telephones, electric Jan. 11, 1887 Lights, incandescent Jan. 11, 1887 Regulators Jan. 11, 1887 Telephones, magnetic Jan. 11, 1887 Telephones, magnetic Jan. 11, 1887 Magneto-electric Jan. 11, 1887 Cut-outs, electro-magnetic Jan. 11, 1887 Telephones, systems Jan. 11, 1887 Recorders Jan. 11, 1887 Jan. 11, 1887 Jan. 11, 1887
355,655 Munson, A. J 355,662 Pike, D. E 355,685 Egan, C. E 355,686 Egan, C. E 355,714 Reinmann, A. L 355,729 Stevens, W. L 355,734 Waite, H. E 355,739 Williamson, D 355,741 Wittenberg, C 355,742 Wittenberg, C 355,743 Wittenberg, C 355,744 Wittenberg, C 355,745 Wittenberg, C 355,746 Wittenberg, C 355,753 Bardonnaut, P. E	Lightning-rods Jan. 4, 1887 Telegraphy, printing Jan. 4, 1887 Telephones, magnetic Jan. 11, 1887 Telephones, electric Jan. 11, 1887 Telephones, magnetic Jan. 11, 1887 Lights, incandescent Jan. 11, 1887 Regulators Jan. 11, 1887 Telephones, magnetic Jan. 11, 1887 Magneto-electric Jan. 11, 1887 Cut-outs, electro-magnetic Jan. 11, 1887 Telephones, systems Jan. 11, 1887 Recorders Jan. 11, 1887
355,662 Pike, D. E	Telegraphy, printing
355,685 Egan, C. E. 355,686 Egan, C. E. 355,687 Egan, C. E. 355,714 Reinmann, A. L. 355,729 Stevens, W. L. 355,734 Waite, H. E. 355,739 Williamson, D. 355,741 Wittenberg, C. 355,742 Wittenberg, C. 355,743 Wittenberg, C. 355,744 Wittenberg, C. 355,745 Wittenberg, C. 355,746 Wittenberg, C. 355,753 Bardonnaut, P. E.	Telephones, magnetic
355,686 Egan, C. E	Telephones, electric
355,687 Egan, C. E	
355,739 Stevens, W. L	Lights, incandescent Jan. 11, 1887 Regulators Jan. 11, 1887 Telephones, magnetic Jan. 11, 1887 Magneto-electric Jan. 11, 1887 Cut-outs, electro-magnetic Jan. 11, 1887 Telephones, systems Jan. 11, 1887 Recorders Jan. 11, 1887
355,734 Waite, H. E	
355,738 Williamson, D 355,739 Wilmarth, F. H 355,741 Wittenberg, C 355,742 Wittenberg, C 355,743 Wittenberg, C 355,745 Wittenberg, C 355,746 Wittenberg, C 355,753 Bardonnaut, P. E	Magneto-electric Jan. 11, 1887 Cut-outs, electro-magnetic Jan. 11, 1887 Telephones, systems Jan. 11, 1887 Recorders Jan. 11, 1887
355,739 Wilmarth, F. II	Cut-outs, electro-magnetic Jan. 11, 1887 Telephones, systems Jan. 11, 1887 Recorders Jan. 11, 1887
355,741 Wittenberg, C	Telephones, systems
355,743 Wittenberg, C	Recorders Jan. 11, 1887
355,744 Wittenberg, C 355,745 Wittenberg, C 355,746 Wittenberg, C 355,753 Bardonnaut, P. E	
355,745 Wittenberg, C	Jan. 11, 1887
355,746 Wittenberg, C 355,753 Bardonnaut, P. E	
355,753 Bardonnaut, P. E	
	Jan. 11, 1887
	Annunciators Jan. 11, 1887
355,793 Siebel, J. E	
355,798 Sutton, G. D	
	Clocks
355,838 Pratt, H. P. and McPh	ierson, L. O Telephones, electric Jan. 11, 1887
355,843 Sloan, E. C	
355,844 Sloan, E. C 355,858 Brainard, F. R	
355,858 Brainard, F. R 355,860 Brown, R. G	
355,867 Denison, R. A	Conductors, underground Jan. 11, 1887
355,871 Gordon, J. E. II	Jan. 11, 1887
355,892 Sternberg, G. M	
355,893 Sternberg, G. M	
355,894 Sternberg, G. M. and L. Sternberg, G. M. and L.	do
	h, W Jan. 11, 1887
355,929 Gould, C. C. and Smith	h, W Jan. 11, 1887
	Telephones, electric Jan. 11, 1887
	Cut-outs, electro-magnetic Jan. 11, 1887
356,019 Voelker, W. L	
	Thermostats Jan. 11, 1887
356,034 Freeman, J. P	Telephones, electric Jan. 11, 1887
356,038 Gould, C. C.	Cut-outs, mechanical Jan. 11, 1887
	Burnley, W Jan. 11, 1887
	Galvanometers Jan. 11, 1887 Jan. 11, 1887 Jan. 11, 1887
	Clocks Jan. 11, 1887
356,070 Himmer, V	Recorders Jan. 11, 1887
	Conductors, underground Jan. 18, 1887
356,152 Munsie, J. F	Jau. 18, 1887
356,153 Munsie, J. F	do Jan. 18, 1887 Conductors Jan. 18, 1887
	Telephones, magnetic Jan. 18, 1887
356,199 Holzer, W	Cut-outs, thermal Jan. 18, 1887
356,206 Patterson, W. R	
356,207 Patterson, W. R	
356,211 Scribner, C. E	
	Lights, systems and appliances Jan. 18, 1887
	Lights, arc, positive feed Jan. 18, 1887

No.	Name.	CLASS.	DATE.	
356,300	Beale, A. M. A	Telephones, electric	Jan. 18, 1887	
356,360	Gee, W	Thermostats	Jan. 18, 1887	
356,390	Barral de Montaud, C	Batteries, secondary	Jan. 18, 1887	
356,403 356,418	Gould, C. C. Nickum, G. S.	Telegraph-poles Telegraphy, transmitters		
356,425	Scribner, C. E	Telephones, systems	Jan. 18, 1887	
356,426	Scribner, C. E	do		
356,427	Scribner, C. E	do	Jan. 18, 1887	
356,448 356,496	Clark, J. H	Applications, tools and machines	Jan. 25, 1887 Jan. 25, 1887	
356,531	Grimes, C. H	Lightning-rods	Jan. 25, 1887	
356,576	Diehl, P.	Motors	Jan. 25, 1887	
356,579	Erhardt, H	Locomotion	Jan. 25, 1887	
356,580 356,594	Fairbanks, H. H. and Coughlin, W. H Lord, G. W	Lights, systems and appliances Telephones, mechanical	Jan. 25, 1887 Jan. 25, 1887	
356,605	Smith, M. M. and Jones, F. P	Alarms	Jan. 25, 1887	
356,614	Bunnell, J. A	Lights, systems and appliances	Jan. 25, 1887	
356,629	Ezell, J. S	do	Jan. 25, 1887	
356,632 356,640	Fuehs, J	Cut-outs, mechanicalElectrolysis	Jan. 25, 1887 Jan. 25, 1887	
356,667	Short, S. H	Magneto-electric		
356,688	Johnson, E. H	Telephones, details	Jan. 25, 1887	
356,689	Johnson, E. H	Telephones, electrie	Jan. 25, 1887	
356,727 356,756	Perry, N. W Farnham, W. H. and Askew, C. B	Batteries, galvanic		
356,771	Leber, L. H. and Currens, M. C	do		
356,786	Pyle, H. L	Lights, arc, positive feed	Feb. 1, 1887	
356.787	Pyle, H. L.	Lights, systems and appliances		
356,788 356,792	Pyle, H. L.——————————————————————————————————	Lights, are		
356,795	Slattery, M. M. M	Lights, ineandescent		
356,796	Slattery, M. M. M	Batteries, galvanic	Feb. 1, 1887	
356,805	Stonitsch, J. and Sweet, W. F	Indicators		
356,834 356,850	Griscom, W. W	Annuneiators		
356,859	Peachey, J. D Warner, E. P	Telephones, systems		
356,875	Harkness, W	Telegraphy, fire, alarms and extinguishers	Feb. 1, 1887	
356,877	Hohenstein, C. J.	Telephones, radiophones		
356,878 356,879	Honston, E. J.	MotorsLights, filaments and carbons	Feb. 1, 1887 Feb. 1, 1887	
356,902	Thomson, E	Magneto-electric		
356,903	Thomson, E	Lights, are	Feb. 1, 1887	
356,940	Hnnt, W. M	Applications, tools and machines	Feb. 1, 1887	
356,963 356,964	Ries, E. E	Car-brakesdo	Feb. 1, 1887 Feb. 1, 1887	
356,981	Brooks, D	Conductors, underground	Feb. 1, 1887	
357,038	Robertson, J. H	Telegraphy, automatie	Feb. 1, 1887	
357,039	Robertson, J. H	Lightning and	Feb. 1, 1887	
357,050 357,051	Vail, J. H	Lightning-rods Telephones, systems	Feb. 1, 1887 Feb. 1, 1887	
357,052	Watkins, F. C	Annunciators	Feb. 1, 1887	
357,053	Watkins, F. C.	Telephones, systems	Feb. 1, 1887	
357,054 357,055	Watkins, F. C.	Telephones, electric	Feb. 1, 1887 Feb. 1, 1887	
357,056	Weil, L	valve-controllersdo		
357,109	Westinghouse, G., jr	Railway signals	Feb. 1, 1887	
357,115	Buckingham, C. L	Regulators		
357,134 357,165	Stockwell, J. O	Telephones, electric		
357,190	Farnham, W. H. and Askew, C. B.	Alarms, burglar		
357,193	Gavillet, W. and Martaresche, L	Applications, tools and machines.	Feb. 8, 1887	
357,280	Harvey, W. B.	Alarms	Feb. 8, 1887	
357,293 357,295	Westinghonse, G., jr., and Schmid, A	Regulators		
357,296	Westinghouse, G., jr., and Schmid, A	Railway signals		
357,310	Etter, J. R	Clocks	Feb. 8, 1887	
357,337	Rosenblatt, S	Telephones, supports		
357,359 357,360	Barney, W. C	Telephones, electric	Feb. 8, 1887 Feb. 8, 1887	
357,372	Crowdus, W. A	Telephones, systems		
357,374	Darling, W. H. and Boek, L., jr	Motors	Feb. 8, 1887	
357,385	Hochhausen, W	Lights, incandescent	Feb. 8, 1887	
357,416 = 357,452 =	Schleicher, G	Alarms, burglar Telephones, electric	Feb. 8, 1887 Feb. 8, 1887	
357,516	Atwater, J. B.	Locomotion	Feb. 8, 1887	
257,538	Scribner, C. E	Telephones, switch-boards	Feb. 8, 1887	
357,539 i	Seety, J. A.	Telephones, systems	Feb. 8, 1887	

No.	NAME.	Class.	DATE.
357,540	Seely, J. A	Telephones, systems	Feb. 8, 1887
357,550	Chase, S. A	Batterics, galvanic	Feb. 8, 1887
357,572	Burton, W. L	Heaters	Feb. 15, 1887
357,576	Card, G. F.	Car-brakes	Feb. 15, 1887
357,589	Fontaine, A. S.——————————————————————————————————	Telephones, systems Batteries, secondary, applications	Feb. 15, 1887
357,627 $357,642$	Tasker, W. H. and Jones, T. J	Batteries, galvanie	Feb. 15, 1887 Feb. 15, 1887
357,646	Upward, A. R. and Pridham, C. W	do	Feb. 15, 1887
357,647	Vander Weyde, P. H	Medical and surgical, body-wear	Feb. 15, 1887
357,659	Fitz-Gerald, D. G	Electrolysis	Feb. 15, 1887
357,682	McDonough, J. W. and Eldred, H. H	Telephones, switches	Feb. 15, 1887
357,687	Patterson, C. A.	Telephones, systems	Feb. 15, 1887
357,705 357,726	Easton, J. W Mehren, J. F	Magneto-electrie	
357,760	Card, G. F	Car-brakes	
357,774	Klán, V. and Spurny, F	Lights, are	
357,789	Rutherford, R. C.	Relays and sounders	Feb. 15, 1887
357,815	Carr, E. E	Alarms, burglar	
357,821	Ford, W. S	Telephones, switch-boards	
357,838	Lee, C. E Short, S. H	Railway signals	Feb. 15, 1887
357,865 357,873	Starr, E. T	Batteries, secondary, applications	Feb. 15, 1887 Feb. 15, 1887
357,881	Wells, E. D	Railway signals	Feb. 15, 1887
357,885	Zoeller, T. J	Telegraphy, fire	Feb. 15, 1887
357,922	Hand, W., Wright, M. C., and Pocoek, F. A.	Railway signals.	Feb. 15, 1887
357,960	Horne, W. L	Telegraphy, fire	Feb. 15, 1887
357,967	Radford, C. M	Telephones, mechanical	Feb. 15, 1887
357,976	Card, G. F	Car-brakes Telephones, mechanical	Feb. 15, 1887 Feb. 15, 1887
357,995 358,002	Howard, J. H Trauernieht, T. H		
358,019	Curtis, C. G. and Crocker, F. B	Batteries, galvanic	Feb. 22, 1887
358,030	Frishmuth, W	do	Feb. 22, 1887
358,031	Frishmuth, W	do	Feb. 22, 1887
358,032	Goldsmith, J. S.		Feb. 22, 1887
358,043	Knight, W. H		Feb. 22, 1887
358,053 358,087	Michales, M. A. and Michaels, A Tasker, W. H. and Jones, T. J	Applications, general	Feb. 22, 1887 Feb. 22, 1887
358,092	Van Gestel, J. T		
358,095	Williams, B		Feb. 22, 1887
358,109	Davis, A. G		
358,111	Fitz-Gerald, D. G	Batteries, secondary	
358,116	Gustin, A. J.		
358,120 358,133	Jones, T. J	Batteries, secondary	Feb. 22, 1007
358,140	Barrett, J. A		Feb. 22, 1887
358,145		Lights, are, gravity feed, gcar	
358,161	McVay, W	Alarms	Feb. 22, 1887
358,250		Annunciators	
358,309		Lights, systems and appliances	
358,314 358,317	Wiley, G. L.	Batteries, galvanie Telephones, systems	Feb. 22, 1887
358,336	Copeland, E. T	Telegraphy, fire, alarms and extinguishers.	Feb. 22, 1887
358,340	Eiekemeyer, R	Magneto-electric	Feb. 22, 1887
358,341		Batteries, secondary	
358,343	Gaiser, C. A	Electro-magnets	Feb. 22, 1887
358,346 358,350	Gordon, J. E. H		
358,357	Haight, II. J Jones, J. S		Feb. 22, 1887
358,360	Krepps, V. A	Circuit-closers	Feb. 22, 1887
358,379	Brown, R. G	Telegraphy, printing	
358,386	Crocker, F. B. and Curtis, C. G.	Batteries, galvanie	Feb. 22, 1887
358,393	Guest, J. H	Telegraphy, fire, alarms and extinguisbers	Feb. 22, 1887
358,415	Slattery, M. M. M	Induction-coils	
358,417 358,464	Summers, L. P		
358,492	Slattery, M. M. M		Mar. 1 1887
358,493		Regulators	Mar. I. 1887
358,511	Upton, E. W	Thermostats	Mar. 1, 1887
358,512	Van Depoele, C. J	Loeomotion	Mar. 1, 1887
358,518		Connectors	
358,519		Railway signals	
358,520 358,521		Valve-controllersdo	
358,592		Connectors	
	T3.1: 73 4	Tiple insulation	M. 1 1007
358,599	Edison, T. A	Lights, incandescent	Mar. 1, 1887
		Lights, incandescent	Mar. 1, 1887

No.	NAME.	CLASS.	DATE.
358,614	Johnson, J. E	Circuit-closers	Mar. 1, 1887
358,645	Bundy, W. L.	Recorders .	Mar. 1, 1887
358,655	Frik, L	Alarms	
358,682	Long, M. W	Motors	
358,691	Page, R. C. and Soden, F. H	Valve-controllers	
358,694	Pearce, F. and Jones, J	Telegraphy, fire	
358,713	Westinghouse, G., jr	Valve-controllers	
358,753	Rogers, J. H	Motors	
358,775 358,778	Graves, F. B Holf, G. D. and McGinty, W. T	ThermostatsConductors, underground	Mar. 1, 1887
358,793	Slattery, M. M. M	Induction-coils	
358,810	Gustin, A. J	Applications, tools and machines	
358,812	House, W. D.	Telephones, electric	Mar. 1, 1887
358,854	Haight, H. J	Thermostats	Mar. 8, 1887
358,864	Lyon, F. G	Telegraphy, fire	
358,866	Massey, A. P	Car-brakes	
358,890	Selden, C	Telegraphy, circuits and systems	Mar. 8, 1887
358,896	Smith, A. B.—————Wildt, E. A.——————————————————————————————————	Annunciators Bells	Mar. 8, 1887
358,910 358,924	Erling, P. R	Applications, tools and machines	
358,939	Palmer, N. F.	Telegraphy, circuits and systems	
358,940	Palmer, N. F	Telephones, electric	
358,941	Palmer, N. F	do	
,358,949	Stern, W. A.	Alarms	
358,961	Convers, A. E	Separators	
358,975	Henzel, G. L	Magnetic locks and bolts	Mar. 8, 1887
359,040 359,050	Tisdale, C. D	Railway signals Locomotion	Mar. 8, 1887
359,050	Blodgett, A. D.		
359,053	Bosworth, C. B	Igniting devices	
359,055	Brewer, H. J	Batteries, galvanic	Mar. 8, 1887
359,063	Desruelles, L. A. W	do	
359,067	Fearon, C	Railway signals	Mar. 8, 1887
359,072	Griscom, W. W	Batteries, secondary	
359,085	Mansfield, G. W	Separators	
359,101 359,165	Shallenberger, O. B	Regulators	
359,188	Tabony, J. H.	Telephones, electric	
359,205	Curtis, C. G., Wheeler, S. S., and Crocker, F. B.	Electro-magnets, machines for winding	
359,210	Haight, H. J	Thermostats	
359,215	Lord, G. W	Telephones, mechanical	
359,216 359,217	Lord, G. W	do	
359,217	Lord, G. W	do	
359,221	MeDill, H. C. and Gaston, J. E	Lights, arc, gravity feed, frictional	
359,243	Davis, G. W	Lights, systems and appliances	Mar. 15, 1887
359,248	Farbaky, S. and Schenek, S	Batteries, secondary	Mar. 15, 1887
359,260	Keffer, F. and McDowell, J. A	Circuit-closers	Mar. 15, 1887
359,303	Westinghouse, G., jr	Applications, tools and machines	
359,306 350,307	Wittenberg, C	Telephones, systems	Mar. 15, 1887
359,307 359,308	Wittenberg, C	Recordersdo	Mar. 15, 1887 Mar. 15, 1887
359,309	Wood, F. B	Bells	
359,313	Bennett, H. M.	Steering and propulsion	Mar. 15, 1887
359,328	Seel, C	Lights, incandescent	Mar. 15, 1887
359,338	Wheeler, A. D.	Recorders	Mar. 15, 1887
359,346	Capers, J. S	Applications are and	Mar. 15, 1887
359,352 359,356	Gardner, E. V	Applications, general	Mar. 15, 1887 Mar. 15, 1887
359,371	Van Nort, S. P	Telephones, switches	Mar. 15, 1887
359,392	Johnson, C. W	Thermostats	Mar. 15, 1887
359,414	Wasserman, G	Applications, tools and machines	Mar. 15, 1887
359,429	Clark, E. P	Motors	Mar. 15, 1887
359,492	Balloch, C		Mar. 15, 1887
359,506	Goodwillie, D. H	Medical and surgical, electrodes	Mar. 15, 1887
359,512	Long, M. W.——————————————————————————————————	Railway signals————————————————————————————————————	Mar. 15, 1887 Mar. 15, 1887
# 10 P 7 + 1-111	Bassett, N. C		Mar. 15, 1887
359,540 359,552		Telephones, systems	Mar. 15, 1887
359,552	Menren, J. F. and Carroll, W		,,
	Mehren, J. F. and Carroll, W Toulmin, M		
359,552 359,575 359,581 359,593	Toulmin, MCarpenter, J. F	AlarmsCar-brakes	Mar. 22, 1887
359,552 359,575 359,581 359,593 359,607	Toulmin, M	AlarmsCar-brakesLocomotion	Mar. 22, 1887 Mar. 22, 1887
359,552 359,575 359,581 359,593 359,607 359,619	Toulmin, M	Alarms Car-brakes Comotion Galyanometers	Mar. 22, 1887 Mar. 22, 1887 Mar. 22, 1887
359,552 359,575 359,581 359,593 359,607	Toulmin, M	Alarms Car-brakes Comotion Galvanometers Telegraph-poles	Mar. 22, 1887 Mar. 22, 1887 Mar. 22, 1887 Mar. 22, 1887

No.	NAME.	Class.	DATE.
359,687	Noyes, B. J	Telegraphy, fire	
359,688	Noyes, B. J	do	
359,689	Noyes, B. JPollak, K	Batteries, galvanic	Mar. 22, 1887
359,690 359,691	Reed, H. T.	Lights, systems and appliances	Mar. 22, 1887
359,713	Cheney, F. A	do	
359,726	Johnson, E. H.	Conductors	
359,738	Pennock, G. B	Conductors, underground	Mar. 22, 1887
359,739 359,747	Powers, J. A Tabony, J. H	Lights, systems and appliances Telephones, systems	Mar. 22, 1887
359,748	Tesla, N	Magneto-electric	Mar. 22, 1887
359,752	Wetmore, J. A	Applications, tools and machines	Mar. 22, 1887
359,770	Buckingham, C. L	Regulators	Mar. 22, 1887
359,799 359,805	Maÿrhofer, C. A	Clocks Regulators	Mar. 22, 1887
359,812	Pennie, H	Insulators	
359,816	Sawyer, W. H	Conductors, underground	Mar. 22, 1887
359,823	Taussig, S.	Telegraphy, fire	Mar. 22, 1887
359,824	Taussig, S.	Conductors	
359,825 359,835	Thompson, C. M.——————————————————————————————————	Conductors	
359,876	Meserole, A. V	Batteries, secondary.	Mar. 22, 1887
359,877	Meserole, A. V	do	Mar. 22, 1887
359,894	Sheehy, R. J	Magneto-electric	Mar. 22, 1887
359,900 359,901	Starr, E. T Starr, E. T	Batteries, secondary, applicationsdo	Mar. 22, 1887 Mar. 22, 1887
359,902	Steffens, M. J		Mar. 22, 1887
359,916	Brady, T. H	Lights, systems and appliances	Mar. 22, 1887
359,934	Main, W	Batteries, secondary	Mar. 22, 1887
359,940	Patee, T. H. and Lawshe, S. R.	Lightning-rods	Mar. 22, 1887
359,982 359,984	Plume, F. C.	Connectors	Mar. 22, 1887 Mar. 22, 1887
359,990	Barrett, J. A	Telegraphy, railway-car	Mar. 29, 1887
359,999	Colby, E. J	Recorders	Mar. 29, 1887
360,002	Downing, W. W. and Upham, A. B.	Lights, systems and appliances	Mer. 29, 1887
360,024 $360,025$	Kookogey, W. P	Batteries, galvanicBells	Mar. 29, 1887 Mar. 29, 1887
360,030	Leipner, W. A	Magueto-electric	Mar. 29, 1887
360,040	Nichols, G. P. and Coombs, M., jr	Lights, systems and appliances	Mar. 29, 1887
360,060	Sperry, E. A	Car-brakes	Mar. 29, 1887
360,068	Waite, H. E.	Telephones, magnetic	Mar. 29, 1887
360,077 360,078	Wright, G. HAbell, J. J. and Gifford, C. B	Railway signals	Mar. 29, 1887 Mar. 29, 1887
360,092	Harvey, W. B	do	Mar. 29, 1887
360,122	Thomson, E	Systems of distribution	Mar. 29, 1887
360,123	Thomson, E	Cut-outs, electro-magnetic	Mar. 29, 1887
360,124 $360,125$	Thomson, E	Systems of distribution	Mar. 29, 1887 Mar. 29, 1887
360,127	Wallis, F. B	Medical and surgical, body-wear	Mar. 29, 1887
360,144	Cowles, E. H. and A. H	Heaters	Mar. 29, 1887
360,151	Hanson, L	Lights, arc, gravity feed, gear	Mar. 29, 1887
360,158	Jablochkoff, P	Batteries, galvanic	Mar. 29, 1887
360,175 360,179	Scott, J. McM Solano, R	Railway signals Car-brakes	Mar. 29, 1887 Mar. 29, 1887
360,198	Bláthy, O. T		
360,216	Fisher, F. E	Motors	Mar. 29, 1887
360,223	Johnson, E. H	Thermostats	
360,244 360,252	Perkins, C. G Smith, W. C	Lights, sockets and keys	
360,254	Tregoning, J		
360,258	Walter, H. E. and Batchclor, C	Magneto-electric	Mar. 29, 1887
360,259	Walter, H. E. and Batchelor, C	do	
360,266 360,308	Barrett, J. A		
360,316	Loesner, II. and De Bravura, M		
360,354	Locke, W. F		
360,362	Radford, C. M	Telephones, mechanical	Mar. 29, 1887
360,375	Conant, T. P		
360,377 360,381	Crowdus, W. A. and Sutton, H. M.		
360,405	Bain, F		
360,429	Goodwillie, D. H	Medical and surgical, electrodes	Apr. 5, 1887
360,447	Kunkle, J. C	Annunciators	Apr. 5, 1887
360,448	Kunkle, J. C		
	Van Rysselherghe R'		
360,492 360,517	Van Ryssclberghe, F	Applications, general	Apr. 5, 1887 Apr. 5, 1887

September Sept				
200,588 Powers J. A	No.	Name.	CLASS.	DATE.
300,558 Powers, J. A.	360 532	Kookogev W. P.	Batteries, galvanic	Apr 5 1887
300,026 Talouy, J. H.		Powers, J. A	Lights, systems and appliances	Apr. 5, 1887
September Sept			Conductors	
September Sept				
Selogist Bennett J. B. and Samuels, F. W. Applications, general. Apr. 5, 188		Westinghouse G. ir		
Segretary Segr		Bennett, J. B. and Samuels, F. W	Applications, general	Apr. 5, 1887
South Sout		Carpenter, B. F	Conductors, underground	Apr. 5, 1887
360,662 Fertigo, O. S. Connectors Apr. 5, 188 360,668 Holtzer, C. W Emitting devices Apr. 5, 188 360,668 Holtzer, C. W Emitting devices Apr. 5, 188 360,673 Hosford, E Medical and surgical, taths Apr. 5, 188 360,773 Hosford, E Medical and surgical, taths Apr. 5, 188 360,823 Singer, W. F Fleegraphy, fire Apr. 5, 188 360,823 Singer, W. F Fleegraphy, fire Apr. 5, 188 360,824 Bernard, W. T Fleegraphy, reed Apr. 12, 188 360,832 Cassel, H. R Electrolysis Apr. 12, 188 360,832 Cassel, H. R Electrolysis Apr. 12, 188 360,832 Cassel, H. R Conductors Apr. 12, 188 360,832 Cassel, H. R Conductors Apr. 12, 188 360,932 Apr. 12, 188 360,933 Valte, H. E Induction-coils Apr. 12, 188 360,938 Whittier, T. P Alarms Apr. 12, 188 360,938 Whittier, T. P Alarms Apr. 12, 188 360,838 Beale, A. M. A Fleegraphy, multiplex Apr. 12, 188 360,838 Beale, A. M. A Fleegraphy, multiplex Apr. 12, 188 360,939 Whittier, T. P Alarms Apr. 12, 188 360,939 Burke, C. G Telegraphy, multiplex Apr. 12, 188 360,939 Burke, C. G Telegraphy, multiplex Apr. 12, 188 360,939 Burke, C. G Telegraphy, printing Apr. 12, 188 360,939 Burke, C. G Telegraphy, multiplex Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939 Cassel, M. A Telephones, celetric Apr. 12, 188 360,939			Bells	
Seconder Herzberg A and Almqvist A W Recorders Apr. 5, 188 Seconder Apr. 15, 188 Seconder Apr. 12, 188 S			Connectors	
Section Holtzer, C. W. Igniting devices		Herzberg, A. and Almqvist, A. W		
Sologea Singer, W. F			Igniting devices	
360,842 Singer, W. F.				
360,842 Akfins, C. H.				
3608.52 Casel, H. R.		Atkins, C. H		
360,852 Casel, H. R.	360,844	Barnard, W. T	Telegraphy, reed	Apr. 12, 1887
Section Sect				
S80,093 Parcelle, A. L.				1
360,925 Solano, R.				. 1
S60,934 Waite, H. E.	360,925	Solano, R	Conductors	Apr. 12, 1887
360,980 Whittier, T. P. Alarms	360,934	Waite, H. E		Apr. 12, 1887
S80,986 Beale, A. M. A				Apr. 12, 1887
S80,987 Beale, A. M. A				
360,998 Benle, A. M. A				
S80,995 Burke, C. G.	360,988	Beale, A. M. A	do	Apr. 12, 1887
Sall, 200 Mosher, S. E. Telephones, calls. Apr. 12, 188				Apr. 12, 1887
Sali				
Sellogon Scheid C			Telephones, calls	
Selden C				Apr. 12, 1887
Sellong Selden C				Apr. 12, 1887
Sel, 1115 Baxter, W., jr Regulators Apr. 12, 188	351,089			
Sal, 116 Baxter, W., jr Motors Apr. 12, 188		Payter W in		
Batter, W., jr		Baxter, W., ir		Apr. 12, 1887
Sali		Baxter, W., jr	Motors	Apr. 12, 1887
Sal, 217 Flad, H				Apr. 12, 1887
Sel 220 Haish, J				
Apr. 12, 188				Apr. 12, 1887
S61,265 Clokey, J. M Conductors Apr. 19, 188	361,248	Winton, H. D	Applications, general	Apr. 12, 1887
361,276		Worms, E. and Balé, J		Apr. 12, 1887
361,273		Clokey, J. M		
Motors			Magneto-electric	
361,276 Mac Farlane, J				Apr. 19, 1887
361,312 Lord, G. W				Apr. 19, 1887
361,319				
Apr. 19, 188 Apr.			Conductors underground	
Telegraphy, duplex			do	Apr. 19, 1887
361,364 Larish, J. W. and Maver, W., jr.	361,356	Gardanier, G. W	Telegraphy, duplex	Apr. 19, 1887
361,455 Settle, M			do	Apr. 19, 1887
Telephones, magnetic			Lights incandescent	Apr. 19, 1887
Secondary Seco			Telephones, magnetic	Apr. 19, 1887
361,498 Farmer, M. G Telegraphy, circuits and systems Apr. 19, 188 361,499 Garl, M. Telephones, mechanical Apr. 19, 188 361,511 Harford, A. B Annunciators Apr. 19, 188 361,520 Hill, C. F Lightning-rods Apr. 19, 188 361,683 Wiese, G. A Lights, arc, gravity feed, gear Apr. 19, 188 361,676 Daft, L Locomotion Apr. 26, 188 361,678 Doehring, C. F. W. and Hoffman, C. G Recorders Apr. 26, 188 361,705 Litchfield, I. W Conductors Apr. 26, 188 361,712 Perkins, C. G Regulators Apr. 26, 188 361,731 Perkins, C. G Cut-outs, thermal Apr. 26, 188 361,731 Stewart, S. B Conductors Apr. 26, 188 361,734 Van Rysselberghe, F Telegraphy, circuits and systems Apr. 26, 188 361,737 Wilkins, G. A Magneto-electric, hand-machines Apr. 26, 188	361,495	Diall, M. N	Lights, systems and appliances	Apr. 19, 1887
Annunciators			Telegraphy, circuits and systems	Apr. 19, 1887
Apr. 19, 188 Apr. 26, 188 Apr.			Appunciators	Apr. 19, 1887
361,587 Gross, M. H Induction-coils Apr. 19, 188 361,663 Wiese, G. A Lights, arc, gravity feed, gear Apr. 19, 188 Locomotion Apr. 26, 188 Apr. 26, 18			Lightning-rods	Apr. 19, 1887
361,663 Wiese, G. A Lights, arc, gravity feed, gear Apr. 19, 18s 361,678 Daft, L Locomotion Apr. 26, 18s 361,678 Doehring, C. F. W. and Hoffman, C. G Recorders Apr. 26, 18s 361,705 Litchfield, I. W Conductors Apr. 26, 18s 361,712 Perkins, C. G Regulators Apr. 26, 18s 361,731 Perkins, C. G Cut-outs, thermal Apr. 26, 18s 361,731 Stewart, S. B Telegraphy, railway-car Apr. 26, 18s 361,734 Van Rysselberghe, F Telegraphy, circuits and systems Apr. 26, 18s 361,737 Wilkins, G. A Magneto-electric, hand-machines Apr. 26, 18s	361,587		Induction-coils	Apr. 19, 1887
361,678 Doehring, C. F. W. and Hoffman, C. G. Recorders Apr. 26, 188 361,705 Litchfield, I. W. Conductors Apr. 26, 188 361,712 Perkins, C. G. Regulators Apr. 26, 188 361,730 Perkins, C. G. Cut-outs, thermal Apr. 26, 188 361,731 Stewart, S. B. Telegraphy, railway-car Apr. 26, 188 361,734 Van Rysselberghe, F. Telegraphy, circuits and systems Apr. 26, 188 361,737 Wilkins, G. A. Magneto-electric, hand-machines Apr. 26, 188	361,663	Wiese, G. A	Lights, arc, gravity feed, gear	Apr. 19, 1887
361,705 Litchfield, I. W Conductors Apr. 26, 188 361,712 Perkins, C. G Regulators Apr. 26, 188 361,713 Perkins, C. G Cut-outs, thermal Apr. 26, 188 361,731 Stewart, S. B Telegraphy, railway-car Apr. 26, 188 361,731 Van Rysselberghe, F Telegraphy, circuits and systems Apr. 26, 188 361,737 Wilkins, G. A Magneto-electric, hand-machines Apr. 26, 188			Locomotion	Apr. 26, 1887
361,712 Perkins, C. G. Regulators Apr. 26, 188 361,713 Perkins, C. G. Cut-outs, thermal Apr. 26, 188 361,731 Stewart, S. B. Telegraphy, railway-car Apr. 26, 188 361,731 Van Rysselberghe, F. Telegraphy, circuits and systems Apr. 26, 188 361,737 Wilkins, G. A Magneto-electric, hand-machines Apr. 26, 188			Conductors	Apr. 26, 1887
361,712 Perkins, C. G. Cut-outs, thermal Apr. 26, 188 361,731 Stewart, S. B. Telegraphy, railway-car Apr. 26, 188 361,731 Stewart, S. B. Conductors Apr. 26, 188 361,734 Van Rysselberghe, F. Telegraphy, circuits and systems Apr. 26, 188 361,737 Wilkins, G. A Magneto-electric, hand-machines Apr. 26, 188			Regulators	Apr. 26, 1887
361,730 Stewart, S. B Telegraphy, railway-car Apr. 26, 188 361,731 Stewart, S. B Conductors Apr. 26, 188 361,734 Van Rysselberghe, F Telegraphy, railway-car Apr. 26, 188 361,737 Wilkins, G. A Magneto-electric, hand-machines Apr. 26, 188	361,713		Cut-outs, thermal	Apr. 26, 1887
361,734 Van Rysselberghe, F Telegraphy, circuits and systems Apr. 26, 188 Magneto-electric, hand-machines Apr. 26, 188		Stewart, S. B	Telegraphy, railway-car	Apr. 26, 1887
361,737 Wilkins, G. A Magneto-electric, hand-machines Apr. 26, 188			Telegraphy circuits and systems	Apr. 26, 1887
361,770 Main, W Magneto-electric Apr. 26, 188			Magneto-electric, hand-machines	Apr. 26, 1887
, , , , , , , , , , , , , , , , , , , ,	361,770		Magneto-electric	Apr. 26, 1887

No.	Name.	CLASS.	DATE.
361,778	Reynolds, G. H	Applications, tools and machines	Apr. 26, 1887
361,779	Reynolds, G. H.	do	Apr. 26, 1887
361,780	Reynolds, G. H	do	Apr. 26, 1887
361,782	Robb, J. T		Apr. 26, 1887
361,794	Walker, S. F	Batteries, galvanie	Apr. 26, 1887
361,797	Weaver, S	Telegraphy, eircuits and systems	Apr. 26, 1887
361,829	Marvin, H. N -	Motors	Apr. 26, 1887
361,843	Sperry, E. A	Transmission of power	Apr. 26, 1887
361,844	Schmid, A		Apr. 26, 1887
361,896	Smith, J. E	Telegraphy, fire	Apr. 26, 1887 Apr. 26, 1887
361,901 361,968	Olsen, J. L. W	Alarms	Apr. 26, 1887
361,973	Warner, E. P	Magneto-electric	Apr. 26, 1887
362,005	Hazazer, E. W	Bells	
362,010	Jewill, G. J	Alarms, burglar	
362,022	Liepmann, H	Electrolysis	
362,053	Ball, C. E	Applications, tools and machines	May 3, 1887
362,062	Cole, J. W	Lightning-rods	May 3, 1887
362,064	Daniels, E. O	do	
362,076	Gilson, S. II	Conductors	
362,099	Maloney, J. A.	Telephones, details	
362,100	Maloney, J. A	Conductors	
362,108	Perkins, C. G.	Conductors	
362,115	Rosenblatt, S	Telephones, supports	
362,128 362,133	Van Choate, S. F	Lights, incandescent————————————————————————————————————	
362,135	Wilson, J. C	Electro-magnets	
362,192	Thaxter, G. E	Circuit-closers	
362,212	Guion, R. L	Thermostats	
362,213	Guion, R. L.	do	
362,216	Hiyne-Berline, S	Bells	
362,217	Kellogg, M. G	Telephones, systems	May 3, 1887
362,289	Lakin, J. A	Lights, are, gravity feed, gear	May 3, 1887
362,310	Parsons, H. W	Dental instruments	
362,312	Pieper, II., fils	Lights, arc, positive feed	
362,322	Sheehy, R. J	Meters	
362,323	Short, S. H. and Nesmith, J. W	Locomotion	7.5
362,376	Gould, C. C. and Smith, W.	Conductors	
362,399	Schlotterbeck, A. G	Lights, systems and appliances	
362,409 362,441	Wicks, P. J Grätzel, R	Railway signals	
362,451	Lange, P	Electrolysis Galvanometers	May 3, 1887 May 3, 1887
362,469	Swan, A	Cut-outs, mechanical	May 3, 1887
362,477	Coughlin, J. J.	Telegraphy, fire	May 3, 1887
362,510	Higham, E. T. and D	Regulators	May 10, 1887
362,531	Partz, A. F. W	Batteries, galvanic	May 10, 1887
362,584	Misell, D	do	May 10, 1887
362,639	Ludlow, W. I	Batteries, secondary	May 10, 1887
362,640	Ludlow, W. 1	do	May 10, 1887
362,652	O'Connell, J. J	Telephones, systems	May 10, 1887
362,682	Van Sands, H	Insulators	
362,739	Gnegan, J. J	Alarms, burglar	May 10, 1887
362,751	Lagerman, A		May 10, 1887
362,798 362,801	Van Depoele, C. J		May 10, 1887
362,847		Lightning-rods	May 10, 1887 May 10, 1887
362,852	Noble, C. M	Batteries, galvanic Lights, are, positive feed	May 10, 1887
362,859	Stearns, J. M., jr	Rheostats	May 10, 1887
362,872	Brooks, D.	Conductors	May 10, 1887
362,902	Pond, C. H	Clocks	May 10, 1887
362,957	Haight, H. J	Thermostats	May 17, 1887
363,039	Abbe, R. W. F	Recorders	May 17, 1887
363,079	Pease, W. M		May 17, 1887
363,106	Wynne, F		May 17, 1887
363,126	Easton, J. W	Magneto-electric	May 17, 1887
363,127	Easton, J. W		May 17, 1887
363,128	Easton, J. W		May 17, 1887
363,129	Easton, J. W		May 17, 1887
363,158	McLaughlin, J. F.	Telegraphy, dial	May 17, 1887
363,182	Tatham, J		May 17, 1887
363,183	Thomson, E	Cut-outs, mechanical	May 17, 1887
363,184	Thomson, E	Regulators	May 17, 1887
363,185 363,186	Thomson, E	Motors.	
	Thomson, E		
	Van Rysselherghe F	'Lalagraphy arranta and arratama	11077
363,188 363,215	Van Rysselberghe, F	Clocks	May 17, 1887 May 17, 1887

No.	Name,	Class.	DATE.
363,250	McElroy, W. J. and Nicholson, J. D.	Locomotion	May 17, 1887
363,290	Freeman, A. H		May 17, 1887
363,304	Stanley, L. T.	Induction-coils	May 17, 1887
363,320 363,332	Hammer, W. J.	HeatersLights, systems and appliances	May 17, 1887 May 17, 1887
363,333	Hammer, W. J.	Galvanometers	May 17, 1887
363,334	Hammer, W. J	Cut-outs, mechanical	May 17, 1887
363,440	Warner, C. D.	Clocks	May 24, 1887
363,449 363,463	Carty, J. J	Telephones, electric	May 24, 1887 May 24, 1887
363,464	Hollerith, H	do	May 24, 1887
363,466	Hunter, R. M	Motors	May 24, 1887
363,498 363,500	Zeiner, J.————————————————————————————————————	Clocks Lights, incandescent	May 24, 1887
363,550	Sedgwick, F	Applications, general	May 24, 1887 May 24, 1887
363,559	Stanley, W., jr	Lights, sockets and keys	May 24, 1887
363,562	Tichenor, A. C.	Batteries, galvanic	May 24, 1887
363,567 363,568	Wightman, M. J. and Lemp, H Wightman, M. J. and Lemp, H	Lightning-arresters Lights, sockets and keys	May 24, 1887 May 24, 1887
363,574	Ball, C. M. and McTighe, T. J	Circuit-closers	May 24, 1887
363,592	Crawford, C	Applications, tools and machines	May 24, 1887
363,593	Clamer, F. J	Applications, general	May 24, 1887
363,611 363,623	Flowers, M. I	Lights, arc, positive feed	May 24, 1887 May 24, 1887
363,644	Jacobs, H. E	Thermostats	May 24, 1887
363,645	Jacobs, H. E	do	May 24, 1887
363,669 363,702	Paine, H. M.————————Vance, S. B. H	Motors Lights, systems and appliances	May 24, 1887 May 24, 1887
363,851	Ritchie, J	Induction-coils	May 31, 1887
363,880	Bailey, M. and Warner, J.	Batteries, galvanic	May 31, 1887
363,886	Dunlap, W. W	Medical and surgical, body-wear	May 31, 1887
363,909 363,969	Pauthonier, CSelden, C	Lights, filaments and carbons————————————————————————————————————	May 31, 1887 May 31, 1887
364,009	Gedge, B. H	Railway signals	
364,031	Maxwell, W	Lights, filaments and carbons	May 31, 1887
364,086 364,133	Card, G. F	Motors Telephones systems	May 31, 1887
364,177	Kitson, G. L	Telephones, systemsConductors, lead-covered	May 31, 1887 May 31, 1887
364,178	Kitson, G. L	do	May 31, 1887
364,204	Armstrong, J. H.	Railway signals.	June 7, 1887
364,221 364,235	Curry, J	Lights, systems and appliances	
364,271	Maiche, L	Telegraphy, automatic	June 7, 1887
364,299	Rogers, C. D	Telegraphy, fire, alarms and extinguishers	June 7, 1887
364,343 364,344	Hall, G. W.——————————————————————————————————	Telegraphy, printing	June 7, 1887
364,353	Kampfe, R	Batteries, galvanicApplications, tools and machines	June 7, 1887
364,356	Leggo, W. A	Telegraphy, circuits and systems	June 7, 1887
364,372	Rae, J. H	Applications, general	
364,429 364,444	Mejer, G. E		
364,471		Telegraphy, automatic	
364,472	Bock, L., jr	Telephones, electric	June 7, 1887
364,475 364,518	Johnson, W. S.		June 7, 1887
364,525	Lanston, T		
364,558	Wamsley, W. F. and McIntosh, T	Connectors	June 7, 1887
364,559	Wamsley, W. F.	Lightwing rode	
364,605 364,619	Schoonmaker, J. H	Lightuing-rods Telegraphy, relays and sounders	June 7, 1887 June 7, 1887
364,639	Francken, V. and Bender, E		June 14, 1887
364,656	Kookogey, W. P.	do	June 14, 1887
364,660 · 364,721	Meserole, A. V	do	June 14, 1887 June 14, 1887
364,760	Holtzer, C. W	Igniting devices	
364,764	Lehy, G. B	Alarms, burglar	June 14, 1887
364,893	Brown, R. G	Telegraphy, printing	
364,894 364,940	Rown, R. G Kassler, W. J	doAlarms	June 14, 1887 June 14, 1887
364,975	Townley, L. P. and Washburn, W. J.	Medical and surgical, body-wear	June 14, 1887
364,994	Degenhardt, F. E	Conductors	June 14, 1887
365,018 365,023	Otis, C. G	Applications, tools and machines	June 14, 1887 June 14, 1887
365,040	Bassett, G. B	Valve-controllers	June 21, 1887
365,059	Essiek, S. V	Telegraphy, printing	June 21, 1887
365,089	Morrison, A. E	Thermostats	June 21, 1887
365,103	Selden, C	Telegraphy, reed	June 21, 1887

			-
No.	Name.	CLASS.	DATE.
365,116 365,159 365,189 365,316 365,334 365,341 365,353 365,353 365,359 365,365 365,414 365,460 365,493 365,498 365,498 365,525 365,525 365,553 365,553 365,553 365,553 365,5726	Bollmann, L Wightman, M. J. and Lemp, H Lemp, H. and Wightman, M. J Winckler, E. and Heilmaun, J. J Hamilton, B. F Hamilton, B. F Hamilton, B. F Long, M. W Smith, J Smith, J Smith, J Smith, F Cole, F. W Jenkins, P. O Thomson, F Jacobs, H. E Buell, C. E Edison, T. A Stecher, M Thompson, E. P Abbott, G. L Anderson, C. G Edison, T. A Lauhoff, J Thomson, F Davis, D., jr Jacobs, H. E Ketchum, O. W Shaffer, C. H Scott, G. B Bulen, G. F	Applications, tools and machines Locomotion do Railway signals Lights, sockets and keys Recorders Batteries, galvanic Telegraphy, fire Lights, incandescent Lights, systems and appliances Thermostats Batteries, secondary, applications Regulators Alarms Lights, incandescent Lights, systems and appliances Lights, incandescent Lights, mechanical Lights, arc Cut-outs, mechanical Thermostats Applications, tools and machines Telegraphy, printing	June 21, 1887 June 28, 1887
	RE	ISSUES.	
10,768 10,791 10,802 10,816 10,838	Johnson, W. S. Kells, C. E., jr. Johnson, W. S. Snowberger, J. Curtiss, R. M.	Do. (Reissue of 322,612) Do. (Reissue of 342,018) Magneto-electrie. (Reissue of 338,197) Applications, tools and machines. (Reissue of 314,167.)	Sept. 28, 1886 Dec. 21, 1886 Jan. 25, 1887 Mar. 8, 1887 May 31, 1887 June 21, 1887

APPENDIX No. VI.

PART III.

CONSISTING OF A

ALPHABETICAL INDEX OF ALL PATENTS

RELATING TO

ELECTRICITY

Issued from July 1, 1886, to June 30, 1887, inclusive, giving names of Inventors, numbers and dates of Patents, and the sub-class to which each belongs.



ALPHABETICAL INDEX

OF

PATENTS RELATING TO ELECTRICITY

FROM JULY 1, 1886, TO JUNE 30, 1887.

No.	Name.	Class.	DATE.	
363,039	Abbe, R. W. F	Paccardore	May 17 1007	
365,498	Abbott, G. L	Recorders Lights, systems and appliances	May 17, 1887 June 28, 1887	
351,239	Abell, J. J. and Gifford, C. B.	Clocks	Oct. 19, 1886	
360,078	Abell, J. J. and Gifford, C. B.	do	Mar. 29, 1887	
354,996	Absterdam, J.	Telegraphy, circuits and systems	Dec. 28, 1886	
354,758	Adams, J. S	Lights, systems and appliances	Dec. 21, 1886	
354,759	Adams, J. S	do	Dec. 21, 1886	
354,760	Adams, J. S.	do	Dec. 21, 1886	
351,148	Adams, T. E	Magneto-electric	Oct. 19, 1886	
351,351	Adams, T. E	Regulators	Oct. 26, 1886	
351,611	Alexander, R	Conductors	Oct. 26, 1886	
354,761	Anderson, A	Telegraphy, fire	Dec. 21, 1886	
363,500	Anderson, C. G	Lights, incandescent	May 24, 1887	
365,499	Anderson, C. G	do	June 28, 1887	
349,472	Anderson, J. C	Conductors, underground	Sept. 21, 1886	
348,371	Andrews, W. S	Cut-outs, thermal	Aug. 31, 1886	
364,204	Armstrong, J. H	Railway signals	June 7, 1887	
355,431	Arthur, W	Relays and sounders	Jan. 4, 1887	
360,842	Atkins, C. H	Separators	Apr. 12, 1887	
357,516	Atwater, J. B.	Locomotion	Feb. 8, 1887	
348,880	Averell, W. W	do	Sept. 7, 1886	
353,840	Bailey, J. S	Clocks	Dec. 7, 1886	
363,880	Bailey, M. and Warner, J	Batteries, galvanic	May 31, 1887	
354,881	Bain, F	Applications, tools and machines	Dec. 28, 1886	
356,024	Bain, F	Thermostats	Jan. 11, 1887	
360,405	Bain, F	Applications, tools and machines	Apr. 5, 1887	
353,346	Baldwin, C. E	Medical and surgical, body-wear	Nov. 30, 1886	
352,796	Baldwin, C. W	Applications, tools and machines	Nov. 16, 1886 May 3, 1887	
362,053 346,345	Ball, C. E	Lights, filaments and carbons	July 27, 1886	
363,574	Ball, C. M. and McTighe, T. J	Circuit-closers	May 24, 1887	
359,492	Balloch, C	Telephones, details	Mar. 15, 1887	
355,753	Bardonnaut, P. E	Conductors	Jan. 11, 1887	
360,844	Barnard, W. T	Telegraphy, reed	Apr. 12, 1887	
357,359	Barney, W. C	Telephones, electric	Feb. 8, 1887	
357,360	Barney, W. C	Telephones, magnetic	Feb. 8, 1887	
357,360 356,390	Barral de Montaud, C	Batteries, secondary	Jan. 18, 1887	
350,715	Barrett, J. A	Conductors, anti-inductive	Oct. 12, 1886	
358,140	Barrett, J. A	Conductors	Feb. 22, 1887	
358,250	Barrett, J. A	Annunciators	Feb. 22, 1887	
359,990	Barrett, J. A	Telegraphy, railway-car	Mar. 29, 1887	
360,266	Barrett, J. A	Annunciators	Mar. 29, 1887	
349,422	Bartlett, C. O	Separators	Sept. 21, 1886	
365,040	Bassett, G. B	Valve-controllers	June 21, 1887	
359,552	Bassett, N. C	Applications, tools and machines	Mar. 15, 1887	
361,115	Baxter, W., jr	Motors	Apr. 12, 1887	
361,116	Baxter, W., jr	Regulators	Apr. 12, 1887	
361,117	Baxter, W., jr	Motors	Apr. 12, 1887	
349,380	Bazin, E	Batteries, galvanic	Sept. 21, 1886	
356,300	Beale, A. M. A	Telephones, electric	Jan. 18, 1887	
360,986	Beale, A. M. A	Telegraphy, multiplexdo	Apr. 12, 1887 Apr. 12, 1887	
360,987 360,988	Beale, A. M. A	do	Apr. 12, 1887	
346,527	Beatle, A. M. A Beattie, J., jr	Motors	Aug. 3, 1886	
346,528		Induction-coils	Aug. 3, 1886	
	Beattie, J., jr	Batteries, galvanic	Mar. 22, 1887	
350 925		1 M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Aratta aung LOUF	
359,835 348,899	Pelk J C			
359,835 348,822 346,708	Belk, J. C.——————————————————————————————————	Conductors	Sept. 7, 1886 Aug. 3, 1886	

No.	Name.	CLASS.	DATE.
363,320	Benardos, N. de and Olszewski, S	Heaters	May 17, 1887
359,313	Bennett, 11. M		Mar. 15, 1887
360,647	Bennett, J. B. and Samuels, F. W.		Apr. 5, 1887
359,050	Bentley, E. M		Mar. 8, 1887
344,938 347,023	Bergmann, S Berliner, E	Telephones, electric Batteries, secondary	July 6, 1886 Ang. 10, 1886
351,569	Berliner, E		Oct. 26, 1886
349,780	Bernsee, C. D.		
349,975	Bickford, J. H	Telephones, systems, automatic	Sept. 28, 1886
349,976	Bickford, J. II	Telephones, calls	Sept. 28, 1886
355,055	Bickford, J. H	Telegraphy, railway-car	
351,485 354,965	Block, C. S. aud Pfister, P. C	Keys	
357,452	Blake, F	Thermostats Telephones, electric	
360,198	Bláthy, O. T	Induction-coils	
359,051	Blodgett, A. D	Annunciators	
345,025	Blodgett, F. M.	Medical and surgical, body-wear	
364,471	Bock, L., jr	Telegraphy, automatic	
364,472	Bock, L., jr	Telephones, electric	
348,949	Böhling, J	Indicators	Sept. 14, 1886
354,530	Boissier, H. R	Lights, are, gravity feed, gear	Dec. 21, 1880
365,116 352,176	Bollmann, L Bonta, J. W	Induction-coils Telephones, electric	
352,177	Bonta, J. W	do	
352,178	Bonta, J. W	do	
352,179	Bonta, J. W.	do	
361,124	Bonta, J. W.	do	Apr. 12, 1887
364,475	Bonta, J. W	do	
348,883	Bossard, A	Magneto-electric	
349,563	Bossard, A	Motors	
359,053 351,488	Bosworth, C. B Bowyer, J. M	Igniting devices	
353,915	Bradley, C. S	Galvanometers	
355,129	Brady, J.	Lights, are	
359,916	Brady, T. 11.	Lights, systems and appliances	
355,858	Brainard, F. R	Circuit-closers	
345,762	Brambel, G	Telephones, electric	
356,270	Bredow, F	Lights, systems and appliances	
346,395	Brewer, H. J	Batteries, galvanic	
359,055 347,318	Brewer, H. J. Brewer, J. P. and Smith, W. C.	Tolography fro	
355,434	Broich, J. and Luebke, A. E. G	Telegraphy, fire Clocks	
348,542	Bronson, L. G	Lights, are	
356,981	Brooks, D	Conductors, underground	
362,872	Brooks, D	Conductors	May 10, 1887
352,852	Brooks, D., jr	do	
345,880	Brown, A. G		July 20, 1886
346,020 347,319	Brown, G. W	Tolomophy 6m	July 20, 1886
347,767	Brown H P	Telegraphy, fire Lights, sockets and keys	Aug. 17, 1886
352,035	Brown, H. P	Cut-outs, electro-magnetic	
347,766	Brown, H. P. and F. H	Rheostats	Aug. 24, 1886
345,209	Brown, R. G	Telegraphy, reed	July 6, 1886
353,120	Brown, R. G	Insulators	Nov. 23, 1886
355,860	Brown, R. G	Telegraphy, multiplex	Jan. 11, 1887
358,379 364,893	Rrown R G	Telegraphy, printing	Feb. 22, 1887
364,894	Brown B. G	do	June 14, 1887
347,025	Brush, C. F	Lights, systems and appliances	Aug. 10 1886
351,961	Brush, C. F	Regulators	Nov. 2, 1886
350,411	Buck, W	Circuit-closers	Oct. 5, 1886
350,615	Buckingham, C. L	Telegraphy, printing	Oct. 12, 1886
350,616	Buckingham, C. L	do	Oct. 12, 1886
350,617	Puelingham, C. I	Parmlatana	Oct. 12, 1886
357,115 359,770	Ruckingham C. L.	Regulatorsdodo	Mar. 22, 1887
347,768	Buell, C. E.	Batteries, secondary, applications	Aug. 24, 1883
353,248	Buell, C. E	Batteries, secondary, applications	Nov. 23, 1886
353,349	Buell, C. E	Lights, systems and appliances	Nov. 30, 1886
365,460	Buell, C. E	Batteries, secondary, applications	June 28, 1887
352,442	Bulen, G. F	Thermostats	Nov. 9, 1886
365,726	Bulen, G. F	Telegraphy, fire	June 28, 1887
358,645	Bundy, W. L	Recorders	Mar. 1, 1887
356,614 360,994	Burko C G	Lights, systems and appliances	Jan. 25, 1887
360,995	Burke C G	Telegraphy, printing	Apr. 12, 188

No.	NAME.	Class.	DATE.
361,047	Burnley, W	Telephones, electric	Apr. 12, 1887
346,423 354,460	Burton, G. D.	Connectors Telegraphy, railway-car	July 27, 1886
354,827	Burton, G. D	do	Dec. 14, 1886 Dec. 21, 1886
357,572	Burton, W. L	Heaters	Feb. 15, 1887
352,445	Butler, J. W	Conductors	Nov. 9, 1886
352,504	Butler, J. W	Conductors, underground	Nov. 9, 1886
347,866	Butz, A. M.	Thermostats	Aug. 24, 1886
345,212	Byllesby, H. M	Systems of distribution	July 6, 1886
354,853 346,840	Campbell, E.	Applications, general	
357,165	Capers, J. S.	Connectors	Aug. 3, 1886 Feb. 1, 1887
359,346	Capers, J. S	Recorders	Mar. 15, 1887
357,576	Card, G. F	Car-brakes	Feb. 15, 1887
357,760	Card, G. F	do	Feb. 15, 1887
357,976	Card, G. F	do	Feb. 15, 1887
364,086	Card, G. F	Motors	May 31, 1887
344,940	Carpenter P F	Rells	July 6, 1886
360,655 355,380	Carpenter, B. F	Connectors	Apr. 5, 1887 Jan. 4, 1887
354,302	Carpenter, G. E. and Tucker, A. F	Telegraphy, railway-car	Dec. 14, 1886
359,593	Carpeuter, J. F.	Car-brakes	Mar. 22, 1887
357,815	Carr, E. E	Alarms, burglar	Feb. 15, 1887
348,512	Carty, J. J.	Anti-induction devices	Aug. 31, 1886
353,350	Carty, J. J	Telephones, systems	Nov. 30, 1886
363,449 360,852	Cassel, H. R	Telephones, electricElectrolysis	May 24, 1887 Apr. 12, 1887
360,853	Cassel, H. R	do	Apr. 12, 1887
346,465	Chandler, T. P., jr	Locomotion	Aug. 3, 1886
346,724	Chandler, T. P., jr	'do	Aug. 3, 1886
355,382	Chapman, W. H. and Donahue, B. C	Indicators	Jan. 4, 1887
355,059	Charles, J	Medical and surgical, body-wear	
346,355	Chase, J. W.	Telegraphy, fire	
350,804 357,550	Chase, S. A	Batteries, galvanic	
359,713	Cheney, F. A.	Lights, systems and appliances	
345,884	Chinnock, C. E	Locomotion	
355,383	Chinnock, C. E	Telephones, calls	
355,384	Chinnock, C. E	Alarms	Jan. 4, 1887
363,593	Clark, E. P	Applications, general	
359,429 353,123	Clark, J. H	Applications, tools and machines	
356,448	Clark, J. H	Alarms	
347,571	Clarke, C. L.	Indicators	
347,572	Clarke, C. L	Clocks	3.5
358,592	Clarke, C. L	Connectors	
361,265	Clokey, J. M	Conductors	Apr. 19, 1887
353,414 359,999	Coerper, C Colby, E. J	Magneto-electric	
365,365	Cole, F. W	Telegraphy, fire	June 28, 1887
362,062	Cole, J. W	Lightning-rods	
351,250	Cole, W. R.	Telephones, electric	Oct. 19, 1886
352,735	Cole, W. R	Telephones, magnetic	
352,806	Coleman F G	Telephones, electric	
360,660 $352,119$	Collins, W. H	Telephones, electric	
360,375	Conant, T. P	Batteries, secondary	
353,288	Conklin, J. I., jr	Relays and sounders	Nov. 30, 1886
358,961	Convers, A. E	Separators	Mar. 8, 1887
360,662	Cooke, C. F.	Lights, arc, gravity feed, gcar	Apr. 5, 1887
358,336	Coughlin I I	Telegraphy, fire, alarms and extinguishers	Yeb. 22, 1887
362,477 360,144	Coughlin, J. J. Cowles, E. H. and A. H.	Telegraphy, fireHeaters	
353,541	Cowper, E. A.		
350,293	Cox, H. B		
350,294	Cox, H. B.	Batteries, galvanic	Oct. 5, 1886
352,043	Cox, H. B		
352,044	Cox, H. B.	Valve-controllers	Mov. 2, 1886
363,592 355,063	Crawford, C	Applications, tools and machines	Dec. 28 1886
358,386	Crocker, F. B. and Curtis, C. G	Batteries, galvanic	
346,532	Crockett, C. H. and Allen, C. C	Bells	
346,533	Crockett, C. H. and Allen, C. C	Igniting devices.	Aug. 3, 1886
357,372	Crowdus, W. A	Telephones, systems	Feb. 8, 1887
358,145 360,377	Crowdus, W. A. and Sutton, H. M	Lights, arc, gravity feed, gear	Mar 20 1887
361,347	Crowdus, W. A. and Sutton, H. M	Conductors, underground	Apr. 19, 1887
001,011	Oronori, Or Landau and American	Commercial and Product	P0, -00.

No.	Name.	CLASS.	DATE.
346,645	Cruickshank, G. M	Conductors	Aug. 3, 1886
354,505	Cull, W. J. and Scattergood, C. F	Annunciators	Dec. 14, 1886
364,221	Cnrry, J	Lights, systems and appliances	June 7, 1887
354,538	Curtis, C. G. and Crocker, F. B	Magneto-electric	Dec. 21, 1886
358,019	Curtis, C. G. and Crocker, F. B	Batteries, galvanie	Feb. 22, 1887
354,539	Curtis, C. G. and Wheeler, S. S.	Magneto-electric	Dec. 21, 1886
359,205	Curtis, C. G., Wheeler, S. S. and Crocker, F. B.	Electro-magnets, machines for winding	Mar. 8, 1887
346,430	Cutten, E. B.	Lights, arc	July 27, 1886
350,975	Cutten, E. B.	do	Oct. 19, 1886
361,676 362,064	Dariels, E. O	Loeomotion	Apr. 26, 1887 May 3, 1887
347,924	Dann, J. E. and Lapp, J.	Telephones, electric	Aug. 24, 1886
357,374	Darling, W. H. and Bock, L., jr	Motors	
349,926	Daves, W.	Circuit-closers	
349,927	Daves, W	Railway signals	
358,109	Davis, A. G.	Circuit-elosers	
347,325	Davis, A. W. S	Telephones, mechanical	Aug. 17, 1886
365,585 ± 359,243 ±	Davis, G. W	Cut-outs, mechanical Lights, systems and appliances	June 28, 1887 Mar. 15, 1887
353,403	Deckard, L. L	Applications, general	Nov. 30, 1886
364,994	Degenhardt, F. E	Conductors	June 14, 1887
347,231	De Khotinsky, A.	Batteries, secondary	Aug. 10, 1886
360,862	Delany, P. B	Clocks	Apr. 12, 1887
351,314	Delmage, W. A	Applications, tools and machines	
347,164	De Lodyguine, A	Lights, filaments and carbons	
363,611 355,867	Denison, J. F. Denison, R. A	Lights, arc, positive feed Conductors, underground	
348,385	Deprez, M. and Carpentier, J.		
351,746	Derrick, F. E. and Brott, S. C	Alarms	Nov. 2, 1886
344,946	De Solomé, G. F.	Batteries, galvanic	
344,947	De Solomé, G. F	do	
344,948	De Solomé, G. F.		
350,296 350,297	Desruelles, L. A. W	Batteries, galvanic	
359,063	Desruelles, L. A. W	do	
345,124	De Virloy, A. L., Commelin, E. and Bailhache, G.	Batteries, secondary	
361,495	Diall, M. N	Lights, systems and appliances	Apr. 19, 1887
349,572	Dick, R	Lights, filaments and carbons	Sept. 21, 1886
361,270	Dickerson, E. N., jr	Thermostats	Apr. 19, 1887
346,094		Clocks	July 27, 1886
363,215 350,482	Dickinson, S. C.	Systems of distribution	
350,668	Diehl, P		
351,167	Diehl, P		
356,576	Diehl, P		
361,678	Doehring, C. F. W. and Hoffman, C. G.	Recorders	
350,299	Dolbear, A. E		Oct. 5, 1886
355,149	Dolbear, A. E.	Indicators	Dec. 28, 1886
361,146 350,046	Doubleday II V and Lyman I	Lights, systems and appliances	Sept. 28, 1886
351,099		Anunnciators	Oct. 19, 1886
352,861	Dowden, C. H	Alarms, burglar	Nov. 16, 1886
360,002	Downing, W. W. and Upham, A. B.	Lights, systems and appliances	Mar. 29, 1887
344,818	Drawbaugh, D	Induction-coils	July 6, 1886
354,541 354,542	Drawbaugh, D	Telephones, electric	Dec. 21, 1886
350,621	Drescher I.	Batteries, galvanic	Dec. 21, 1886
352,084		Induction-coils	
354,892	Du Bois, J. S	Conductors, underground	Dec. 28, 1886
360,567	Dunham, T. H	Conductors	Apr. 5, 1887
,			May 21 1997
363,886	Dunlap, W. W	Medical and surgical, body-wear	May 31, 1007
363,886 346,433	Dunlap, W. W. Duplain, F. P.	Medical and surgical, body-wear	July 27, 1886
363,886 346,433 348,155	Dunlap, W. W. Duplain, F. P. Dyer, R. N.	Medical and surgical, body-wear Conductors Lights, systems and appliances	July 27, 1886 Aug. 24, 1886
363,886 346,433 348,155 348,896	Dunlap, W. W Duplain, F. P Dyer, R. X Eastman, W. H	Medical and surgical, body-wear Conductors Lights, systems and appliances Telephones, mechanical	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886
363,886 346,433 348,155 348,896 357,705	Dunlap, W. W Duplain, F. P Dyer, R. N Eastman, W. H Easton, J. W	Medical and surgical, body-wear	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886 Feb. 15, 1887
363,886 346,433 348,155 348,896 357,705 361,273 361,274	Dunlap, W. W Duplain, F. P Dyer, R. N Eastman, W. H Easton, J. W Easton, J. W	Medical and surgical, body-wear	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886 Feb. 15, 1887 Apr. 19, 1887 Apr. 19, 1887
363,886 346,433 348,155 348,896 357,705 361,273 361,274 363,126	Dunlap, W. W Duplain, F. P Dyer, R. N Eastman, W. H Easton, J. W Easton, J. W Easton, J. W Easton, J. W	Medical and surgical, body-wear Conductors Lights, systems and appliances Telephones, mechanical Magneto-electric do Motors Magneto-electric	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886 Feb. 15, 1887 Apr. 19, 1887 Apr. 19, 1887 May 17, 1887
363,886 346,433 348,155 348,896 357,705 361,273 361,274 363,126 363,127	Dunlap, W. W Duplain, F. P Dyer, R. X Eastman, W. H Easton, J. W	Medical and surgical, body-wear Conductors Lights, systems and appliances Telephones, mechanical Magneto-electricdo Motors	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886 Feb. 15, 1887 Apr. 19, 1887 Apr. 19, 1887 May 17, 1887 May 17, 1887
363,886 346,433 348,155 348,896 357,705 361,273 361,274 363,126 363,127 363,128	Dunlap, W. W Duplain, F. P Dyer, R. N Eastman, W. H Easton, J. W	Medical and surgical, body-wear Conductors Lights, systems and appliances Telephones, mechanical Magneto-electric do Magneto-electricdodododododo	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886 Feb. 15, 1887 Apr. 19, 1887 Apr. 19, 1887 May 17, 1887 May 17, 1887 May 17, 1887
363,886 346,433 348,155 348,896 357,705 361,273 361,274 363,126 363,126 363,128 363,128	Dunlap, W. W Duplain, F. P Dyer, R. N Eastman, W. H Easton, J. W	Medical and surgical, body-wear Conductors Lights, systems and appliances Telephones, mechanical Magneto-electric do Magneto-electric do do do do	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886 Feb. 15, 1887 Apr. 19, 1887 Apr. 19, 1887 May 17, 1887 May 17, 1887 May 17, 1887 May 17, 1887
363,886 346,433 348,155 348,896 357,705 361,273 361,274 363,126 363,127 363,128	Dunlap, W. W Duplain, F. P Dyer, R. N. Eastman, W. H Easton, J. W	Medical and surgical, body-wear Conductors Lights, systems and appliances Telephones, mechanical Magneto-electric do Motors Magneto-electric do do do do Conductors, lead-covered	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886 Feb. 15, 1887 Apr. 19, 1887 Apr. 19, 1887 May 17, 1887 May 17, 1887 May 17, 1887 July 20, 1886
363,886 346,433 348,155 348,896 357,705 361,273 361,274 363,126 363,127 363,128 363,129 345,956	Dunlap, W. W Duplain, F. P Dyer, R. N	Medical and surgical, body-wear Conductors Lights, systems and appliances Telephones, mechanical Magneto-electric do Magneto-electric do do do do	July 27, 1886 Aug. 24, 1886 Sept. 7, 1886 Feb. 15, 1887 Apr. 19, 1887 Apr. 19, 1887 May 17, 1887 May 17, 1887 May 17, 1887 Muly 20, 1886 Aug. 10, 1886 Dec. 14, 1886

No.	Name.	CLASS.	DATE.
348,114 Edis	son, T. A	Telephones, details	Aug. 24, 1886
351,855 Edis	son, T. A	Lights, incandescent	Nov. 2, 1886
351,856 Edis	son, T. A	do	Nov. 2, 1886
353,783 Edis	son, T. A	Lights, filaments and carbons	
	son, T. A	Lights, incandescent	
	son, T. A	do	
365,465 Edis	son, T. A		
	son, T. A	Lights, filaments and carbons	
	son, T. A. and Gilliland, E. Tson, T. A. and Gilliland, E. Tson,	Telegraphy, railway-car	
355,443 Edw	ards, H. F	Lights, systems and appliances	Jan. 4, 1887
355,685 Ega	n, C. E	Telephones, magnetic	Jan. 11, 1887
355,686 Ega	n, C. E.	Telephones, electric	Jan. 11, 1887
	n, C. E	Telephones, magnetic	Jan. 11, 1887 Aug. 3, 1886
354,402 Eich	ameyer, J. C	Telephones, magnetic	
351.902 Eich	kemeyer, R	Magneto-electric	Nov. 2, 1886
351,903 Eicl	zemeyer, R	do	
	kemeyer, R	Talanhouse magnetic	
351,905 Eich 351,906 Eich	kemeyer, R	Telephones, magnetic Magneto-electric	Nov. 2, 1886
351,907 Eicl	kemeyer, R	do	Nov. 2, 1886
352,234 Eicl	kemeyer, R	do	Nov. 9, 1886
	kemeyer, R	Dettering and desired	
358,341 Elie 360,517 Em.	son, U. P	Applications, general	Feb. 22, 1887 Apr. 5, 1887
346,031 Em	mner, J., jr	Telephones, magnetic	July 20, 1886
352,086 Enn	nis, H. J	Indicators	Nov. 2, 1886
	art, E. S	do	Apr. 19, 1887
	ard, T	Batteries, galvanic	July 20, 1886 Jan. 25, 1887
	ing, P. R	Applications, tools and machines	Mar. 8, 1887
354,466 Esc	hwei, C	Cnt-outs, thermal	Dec. 14, 1886
365,059 Essi	ick, S. V	Telegraphy, printing	June 21, 1887
	er, J. R	Clocks	Feb. 8, 1887
	II, J. Srbanks, II. II. and Coughlin, W. H	Lights, systems and appliances	Jan. 25, 1887 Jan. 25, 1887
	rbanks, L. S	Telephones, magnetic	Sept. 21, 1886
348,455 Fan	rehild, J. M	Cut-outs, mechanical	Aug. 31, 1886
	rchild, J. M. and O'Connor, J	do	Ang. 31, 1886
	baky, S. and Schenek, Sbaky, S. and Schenek, S	Batteries, secondary	July 6, 1886 Sept. 7, 1886
	baky, S. and Schenek, S	do	Mar. 15, 1887
349,214 Far	mer, M. G	Circuits and systems	Sept. 14, 1886
	mer, M. G		Oct. 19, 1886
	mer, M. G	Telephones, relays and repeaters	Oct. 19, 1886 Oct. 19, 1886
351,588 Far	mer, M. G	Telephones, systems	Oct. 26, 1886
	mer, M. G		Apr. 19, 1887
	nham, I. H	Cut-outs, thermal	Apr. 5, 1887
	nham, W. H. and Askew, C. B		Feb. 1, 1887
	ron, C		
345,292 Fen	ner, R. E	Clocks	July 13, 1886
351,369 Fer	guson, A. C	Lights, systems and appliances	Oct. 26, 1886
360,672 Fer	ng, O. S	Connectors	Apr. 5, 1887
353,128 Fie. 346,990 Fin	ld, S. D	Telegraphy, dynamo Locomotion	Aug. 10, 1886
350,728 Fish	her, F. E	Motors	Oct. 12, 1886
360,216 Fish	her, F. E	do	Mar. 29, 1887
	her, 1	Igniting devices	June 7, 1887
	her, W. C		Aug. 10, 1886 Apr. 12, 1887
	ch, F. K	Indicators	Mar. 29, 1887
349,788 Fite	ch, N. T	Insulators	Sept. 28, 1886
	z-Gerald, D. G		Feb. 15, 1887
	z-Gerald, D. G		Feb. 22, 1887 Apr. 12, 1887
	d, Hnders, B. S		Aug. 3, 1886
350,823 Fle	ckinger, J	Alarms, burglar	Oct. 12, 1886
363,623 Flo	wers, M. I	Magnetic locks and bolts	May 24, 1887
357,589 For	ntaine, A. S	Telephones, switch-boards	Feb. 15, 1887 Feb. 15, 1887
	rd, W. S		Oct. 5, 1886
344.823 Fot	trell. J	Conductors	July 6, 1886
354,508 Fra	1 1 7 7	Alarms	1100 11 1886

No.	Name.	· Class.	DATE.
364,639	Francken, V. and Bender, E	Batteries, galvanic	June 14, 1887
363,290	Freeman, A. H	Alarms, burglar	May 17, 1887
356,034	Freeman, J. P.	Telephones, electric	Jan. 11, 1887
352,865 358,655	Freir, S. P.	Telegraphy, quadruplex	Nov. 16, 1886
358,030	Frishmuth, W	AlarmsBatteries, galvanic	Mar. 1, 1887 Feb. 22, 1887
358,031	Frishmuth, W	do	Feb. 22, 1887
350,126	Frost, J. W.	Telegraphy, fire	Oct. 5, 1886
354,856	Frost, J. W		Dec. 21, 1886
350,426 356,632	Frost, J. W. and Lake, S. D Fuchs, J	Cut-outs, mechanical	Oct. 5, 1886 Jan. 25, 1887
358,343	Gaiser, C. A.	Electro-magnets	Feb. 22, 1887
349,839	Gannon, P	Telephones, calls	Sept. 28, 1886
349,879	Garcia, D. T	Clocks	Sept. 28, 1886
361,356 359,352	Gardanier, G. WGardner, E. V	Telegraphy, duplexApplications, general	
361,499	Garl, M	Telephones, mechanical	Apr. 19, 1887
348,120	Gaskins, G. H	Telephones, supports	Aug. 24, 1883
351,589	Gaulard, L. and Gibbs, J. D	Systems of distribution	Oct. 26, 1886
357,193	Gavillet, W. and Martaresche, L	Applications, tools and machines	Feb. 8, 1887 Nov. 16, 1886
352,645 349,708	Gazaille, II. and Low, H. F	Telegraphy, fire	Sept. 28, 1886
349,579	Geary, J.	Annunciators	Sept. 21, 1886
349,580	Geary, J	do	Sept. 21, 1886
354,858	Geary, J.	Alarms, burglar	Dec. 21, 1886
364,009 356,360	Gedge, B. H	Railway signals Thermostats	May 31, 1887 Jan. 18, 1887
365,359	Germain, P	Batteries, galvanic	June 21, 1887
349,493	Gerry, J. H	Clocks	Sept. 21, 1886
349,494	Gerry, J. H. and Hunter, M. E	do	Sept. 21, 1886
353,489 347,589	Gerst, M Ghegan, J. J	Telephones, mechanical	Nov. 30, 1886
352,647	Ghegan, J. J	Indicators	Aug. 17, 1886 Nov. 16, 1886
355,S15	Ghegan, J. J	Alarms	Jan. 11, 1887
362,739	Gliegan, J. J	Alarius, burglar	May 10, 1887
351,319	Gibson, J. H	Railway signals	Oct. 19, 1886
351,973 348,121	Gifford, A. T	Lights, are Separators	Nov. 2, 1886 Aug. 24, 1886
345,838	Giles, C. K: and Fenner, R. E.	Applications, general	July 20, 1886
356,197	Gilliland, E. T	Telephones, magnetic	Jan. 18, 1887
362,076	Gilson, S. II	Conductors	May 3, 1887
346,587 352,407	Glanville, W. L	Alarms	
352,948	Glover, L. S.	Telephones, calls	
348,901	Goldner, W. C	Batteries, galvanie	Sept. 7, 1886
358,032	Goldsmith, J. S.	Recorders	
359,506	Goodwillie, D. HGoodwillie, D. H	Medical and surgical, electrodes	Mar. 15, 1887
360,429 354,781	Gordon, J. E. H	Lights, sytems and appliances	
354,782	Gordon, J. E. II	do	Dec. 21, 1886
354,783	Gordon, J. E. H	Systems of distribution	Dec. 21, 1886
355,871	Gordon, J. E. II	Meters	
358,346 354,469	Gordon, J. E. H	Systems of distribution Telephones, systems	Dec. 14 1886
356,038	Gould, C. C	Cut-outs, mechanical	Jan. 11, 1887
356,403	Gould, C. C	Telegraph-poles	Jan. 18, 1887
355,928	Gould, C. C. and Smith, W	Telephones, systems	Jan. 11, 1887
355,929 362,376	Gould, C. C. and Smith, WGould, C. C. and Smith, W	Conductors	
344,827	Grant, J.	Conductors, underground	
362,441	Grätzel, R	Electrolysis	May 3, 1887
351,759	Graver, E.S.	Railway signals	Nov. 2, 1886
358,775	Graves, F. B	ThermostatsMedical and surgical, body-wear	
347,592 351,697	Greene, F. V		
355,446	Greenfield, E. T	Lights, systems and appliances	Jan. 4, 1887
356,531	Grimes, C. H.	Lightning-rods	Jan. 25, 1887
356,834		Motors	Feb. 1, 1887
359,072 361,587	Griscom, W. W.	Batterics, secondaryInduction-coils	
347,707	Grovesteen, M. W		Aug. 17, 1886
359,673	Grovesteen, M. W.	do	Mar. 22, 1887
349,710	Guest, J. H	Recorders	Sept. 28, 1886
358,393	Guest, J. H	Telegraphy, fire, alarms and extinguishers	Feb. 22, 1887
354,131 355,164	Guion, R. L.		Dec. 14, 1886 Dec. 28, 1886
362.212	Guion, R. L.	do	
	,		,

No.	Name.	Class.	DATE.	
362,213	Guion, R. L	Thermostats	May 3, 1887	
358,116	Gustin, A. J	Applications, general	Feb. 22, 1887	
358,810	Gustin, A. J	Applications, tools and machines	Mar. 1, 1887	
349,040	Hadden, W	Railway signals	Sept. 14, 1886	
351,913	Haddock, W	Conductors, underground	Nov. 2, 1886	
358,350	Haight, H. J	Thermostats	Feb. 22, 1887	
358,854 359,210	Haight, H. J	do	Mar. 8, 1887 Mar. 8, 1887	
362,957	Haight, H. J	do	May 17, 1887	
361,220	Haish, J	Lights, systems and appliances	Apr. 12, 1887	
350,737	Hall, E. L	Telephones, details	Oct. 12, 1886	
364,343	Hall, G. W.	Telegraphy, printing	June 7, 1887	
365,339	Hamilton, B. F	Locomotion	June 21, 1887	
365,340	Hamilton, B. F	do	June 21, 1887	
365,341 350,130	Hamilton, B. F	Telephones, magnetic	June 21, 1887	
363,332	Hammer, W. J	Lights, systems and appliances	Oct. 5, 1886 May 17, 1887	
363,333	Hammer, W. J	Galvanometers		
363,334	Hammer, W. J	Cut-outs, mechanical		
357,922	Hand, W., Wright, M. C. and Pocoek, F. A.	Railway signals	Feb. 15, 1887	
355.165	Hanks, M.	Insulators		
349,392	Hansell, W	Magneto-electric		
360,151 348,465	Hanson, L	Lights, arc, gravity feed, gear		
364.344	Hard, J. R.	Batteries, galvanic		
356,282	Harding, A	Lights, arc, positive feed		
361,511	Harford, A. B	Annunciators	Apr. 19, 1887	
356,875	Harkness, W	Telegraphy, fire, alarms and extinguishers	Feb. 1, 1887	
344,962	Harris, R. L	Loconiotion		
348,008	Harris, R. L	do	Aug. 24, 1886	
358,609	Harris, R. L	Inernstation	Mar. 1, 1887	
354,637 357,280	Hart, G. W	Alarms		
360,092	Harvey, W. B	Clocks		
348,845	Haskins, C. C	Lights, systems and appliances	Sept. 7, 1886	
352,317	Haskins, C. D	Relays and sounders	Nov. 9, 1886	
346,475	Hawken, T	Insulators		
353,940	Hayes, H. V.	Telephones, systems		
362,005 352,320	Hazazer, E. W	Bells		
351,597	Hedge, J. F., jr	Telephones, calls		
353,305	Henneberg, H. and Lorenz, R. O	Lights, are		
345,845	Henry, J. C.	Locomotion	July 20, 1886	
351,599	Henzel, C	Annunciators	Oct. 26, 1886	
351,600	Henzel, C. and Wood, W	Magnetic locks and bolts	Oct. 26, 1886	
358,975	Henzel, G. L	do	Mar. 8, 1887	
350,676	Hering, C		Oct. 12, 1886 Oct. 12, 1886	
350,882 347,602	Herron, H. C	Telegraphy, transmitters Telegraph-poles	Aug. 17, 1886	
349,042	Herz, C		Sept. 14, 1886	
349,043	YY C	do	Sept. 14, 1886	
360,692	Herzberg, A. and Almqvist, A. W	Recorders	Apr. 5, 1887	
350,626		Annunciators	Oct. 12, 1886	
347,038	Heymann F and E W	Recorders	Aug. 10, 1886	
348,971 $348,972$	Heymann E and F W	Lights, are	Sept. 14, 1886 Sept. 14, 1886	
348,973		do	Sept. 14, 1886	
359,607	Heysinger, I. W	Locomotion	Mar. 22, 1887	
354,788		Lights, incandescent	Dec. 21, 1886	
356,640	Hickley, A. S	Electrolysis	Jan. 25, 1887	
362,510	Higham, E. T. and D		May 10, 1887	
349,715	Higham, E. T. and D	Motors	Sept. 28, 1886	
349,716 $361,520$	Higham, E. T. and DHill, C. F	Magneto-electric	Sept. 28, 1886 Apr. 19, 1887	
351,601	Hill, W. S	Lightning-rods Lights, are	Oet. 26, 1886	
354,525	Himmer, V	Clocks	Dec. 14, 1886	
355,820	Himmer, V	do	Jan. 11, 1887	
356,069	Himmer, V	do	Jan. 11, 1887	
356,070	Himmer, V			
351,602	Hirlimann, C. J			
359,356 356,040	Hitehcock, C. A. and Burnley, W.	Telephones, switches	Mar. 15, 1887 Jan. 11, 1887	
357,385	Hochhausen, W	Lights, incandescent		
351,772	Hoffman, J. W	Alarms, burglar	Nov. 2, 1886	
352,324	Hoffman, J. W	Batteries, galvanic	Nov. 9, 1886	
356,877	Hohenstein, C. J	Telephones, radiophones	Feb. 1, 1887	
350,365	Holdsworth, J. W	Insulators	Oct. 5, 1886	

No.	NAME.	Class.	DATE.
363,463	Hollerith, H	Car-brakes	May 24, 1887
363,464	Hollerith, H	do	May 24, 1887
358,778	Holt, G. D. and McGinty, W. T		Mar. 1, 1887
360,696	Holtzer, C. W	Igniting devices	Apr. 5, 1887
364,760 356,199	Holtzer, C. W	Cut-outs, thermal	June 14, 1887 Jan. 18, 1887
357,960	Horne, W. L	Telegraphy, fire	Feb. 15, 1887
360,773	Hosford, E	Medical and surgical, baths	Apr. 5, 1887
351,699	Houghton, E. J. and Collet, T. M.	Regulators	Oct. 26, 1886
354,139	House, H. A. and H. A., jr	Relays and sounders	Dec. 14, 1886
358,812	House, W. D.	Telephones, electric	Mar. 1, 1887
356,878	Houston, E. J	Motors	Feb. 1, 1887
357,995 348,125	Howard, J. H. Howell, J. W	Telephones, mechanical Lights, systems and appliances	Feb. 15, 1887 Aug. 24, 1886
352,691	Howell, J. W	Systems of distribution	Nov. 16, 1886
353,035	Howell, J. W	Magneto-electric	Nov. 23, 1886
356,041	Howell, J. W	Galvanometers	Jan. 11, 1887
356,042	Howell, J. W	do	Jan. 11, 1887
355,611	Howson, H	Connectors	Jan. 4, 1887
350,200	Humes, J. J. R	Applications, tools and machines	Oct. 5, 1886
356,940 349,650	Hunt, W. M.——————————————————————————————————	Clocks	Feb. 1, 1887 Sept. 21, 1886
347,937	Hunter, R. M	Regulators	Aug. 24, 1886
363,466	Hunter, R. M		
352,754	Hurlbut, S. E	Conductors, underground	Nov. 16, 1886
350,430	Hussey, C. A	Clocks	Oct. 5, 1886
350,431	Hussey, C. A	do	Oct. 5, 1880
350,432 350,433	Hussey, C. A	do	Oct. 5, 1886 Oct. 5, 1886
350,434		do	
350,435	Hussey, C. A	do	Oct. 5, 1886
362,216	Iliyne-Berline, S.	Bells	May 3, 1887
348,562		Applications, tools and machines	
354,791		Magneto-electric	
353,789		Telegraphy, railway-car	
360,158 363,644		Batteries, galvanic	
363,645		do	
365,438		do	
365,600	Jacobs, H. E	do	June 28, 1887
349,797	Jagel, J. M.	Conductors, underground	Sept. 28, 1886
352,412	James, De W. C	Railway signals	Nov. 9, 1886
349,222 349,999		Batteries, galvanie	
350,000	Jenkins J	Lights, are	Sept. 28, 1886
351,834	Jenkius, M. R	Keys	Nov. 2, 1886
365,384	Jenkins, P. O.	Lights, incandescent	June 28, 1887
354,639	Jenney, C. D	Lights, are	Dec. 21, 1886
362,010	Jewill, G. J	Alarms, burglar	Apr. 26, 1887
359,392		Thermostats	
354,320	Johnson, E. H.	Conductors	Dec. 14, 1880
356,688 356,689		Telephones, details Telephones, electric	
359,726		Conductors	
360,223	Johnson, E. H	Thermostats	Mar. 29, 1887
35.8,614	Johnson, J. E	Circuit-closers	Mar. 1, 1887
351,702		Thermostats	
352,874		do	
364,518 360,528		Telegraphy, quadruplex	
353,683	Jones, J. S	Telephones, mechanical	Dec. 7 1886
353,684		do	
358,357		do	
350,828	Jones, L. B	Electro-magnets, machines for winding	Oct. 12, 1880
350,829	Jones, L. B	Connectors	Oct. 12, 1886
355,172 358,120	Jones, T. J	Lights, arc, gravity feed, frictional	
347,300	Julien, E		
352,059	Kaler, W. A.		
364,353	Kampfe, R		
364,940	Kassler, W. J	Alarms	June 14, 1887
349,654	Keegan, V. E	Motors	Sept. 21, 1886
355,400	Keeler, T. B	Lights, systems and appliances	Jan. 4, 1887
359,260 348,977	Keilholtz P O	Circuit-closersLights, are	Mar. 15, 1887
348,978		Lights, aredo	
040.340			

ALPHABETICAL INDEX-ELECTRICITY.

No.	Name.	Class.	DATE.
362,217	Kellogg, M. G	Telephones, systems	May 3, 1887
353,141	Kendall, J. A	Batteries, galvanic	Nov. 23, 1886
350,003	Kennedy, R	Magneto-electric	Sept. 28, 1886
348,328	Kenyon, B. L	Telephones, mechanical	Aug. 31, 1886
345,383 365,604	Kessler, H. P. J Ketchum, O. W	Applications, tools and machines	July 13, 1886 June 28, 1887
345,511	Khotinsky, A	Batteries, secondary	July 13, 1886
345,700	Kinsman, F. E	Car-brakes	July 20, 1886
364,177	Kitson, G. L	Conductors, lead-covered	May 31, 1887
364,178	Kitson, G. L	do	May 31, 1887
357,774 346,924	Klán, V. and Spurny, FKnell, J, W	Lights, are	Feb. 15, 1887
354,793	Knight, W. H	Lights, systems and appliances Locomotion	Aug. 10, 1886 Dec. 21, 1886
358,043	Knight, W. H	do	Feb. 22, 1887
353,142	Knowles, E. R	Batteries, secondary, applications	Nov. 23, 1886
351,704	Knudson, A. A	Telephones, mechanical	Oct. 26, 1886
360,308 351,869	Knudson, A. A	Relays and sounders	Mar. 29, 1887
360,024	Kookogey, W. P.	Lights, incandescent Batteries, galvanie	Nov. 2, 1886 Mar. 29, 1887
360,532	Kookogey, W. P.	do	Apr. 5, 1887
364,656	Kookogev, W. P.	do	June 14, 1887
358,360	Krepps, V. A.	Circuit-closers	Feb. 22, 1887
349,849 360,447	Kugler, G. ———————————————————————————————————	Medical and surgical, body-wear	Sept. 28, 1886
360,448	Kunkle, J. C	do	Apr. 5, 1887 Apr. 5, 1887
353,566	Lackersteen, M. H	Applications, general	Nov. 30, 1886
362,751	Lagerman, A	Applications, tools and machines	May 10, 1887
362,289	Lakin, J. A	Lights, arc, gravity feed, gear	May 3, 1887
360,025 350,140	Lambdin, C Lane, G. M	Lights, arc, positive feed	Mar. 29, 1887 Oct. 5, 1886
351,367	Langdon-Davies, C	Telegraphy, circuits and systems	Oct. 26, 1886
362,451	Lange, P.	Galvanometers	May 3, 1887
364,525	Lanston, T	Telegraphy, printing	June 7, 1887
349,397 349,398	Lantz, J. A.	Connectors	Sept. 21, 1886
361,365	Larish, J. W	Telephones, calls	Sept. 21, 1886 Apr. 19, 1887
361,364	Larish, J. W. and Maver, W., jr	Telegraphy, duplex	Apr. 19, 1887
363,249	Lauhoff, J	Telephones, mechanical	May 17, 1887
365,525 356,771	Lauhoff, JLeber, L. H. and Currens, M. C	do	June 28, 1887 Feb. 1, 1887
356,838	Lee, C. E	Thermostats	Feb. 15, 1887
364,356	Leggo, W. A	Telegraphy, circuits and systems	June 7, 1887
346,207	Le Grande, W. W	Batteries, galvanie	July 27, 1886
351,384 352,903	Le Grande, W. W	Railway signals	Oct. 26, 1886 Nov. 16, 1886
352,549	Le Grande, W. W. and Burton, G. W	Telegraphy, transmitters	Nov. 16, 1886
364,764	Lehy, G. B	Alarms, burglar	June 14, 1887
360,030	Leipner, W. A.		Mar. 29, 1887
352,877 $352,621$	Leland, E. J		
352,622	Lemp, H. aud Wightman, M. J.	Cut-outs, thermal	Nov. 16, 1886
365,189	Lemp, H. and Wightman, M. J.	Cut-outs, mechanical	June 21, 1887
349,109	Lenaerts, L	Valve-controllers	Sept. 14, 1886
345,596	Lenoir, E. J. J		
347,943 346,484	Leonardson, J. M		
346,485	Liemke, H. H.		Aug. 3, 1886
362,022	Liepmann, H	Electrolysis	
353,637	Likly, H., Carpenter, C. A. and Graves, F. B.	Thermostats	Nov. 30, 1886
350,983 350,984	Linville, J. H		
355,771	Linville, J. H		
349,049	Lippincott, J. E		
347,247	Lister, J. T	Lights, filaments and carbons	Aug. 10, 1886
350,203	Lister, J. T		Oct. 5, 1886
356,879 361,705	Lister, J. I	Lights, filaments and carbons	Apr. 26 1887
355,330		Conductors, underground	
360,354	Locke, W. F	Insulators	Mar. 29, 1887
346,377	Lockwood, W. C	Telephones, magnetic	July 27, 1886
360,316	Loesner, H. and De Bravura, M	Conductors, underground	Mar. 29, 1887
345,641 345,642	Long M W	Railway signals	July 13, 1886
358,682	Long, M. W	Motors	Mar. 1, 1887
359,512	Long, M. W	Railway signals	Mar. 15, 1887
365,345 350,754	Long, M. W	Populators	Oat 12 1887
350,754	Loomis, O. F. and Cooley, H. W	Regulators	12, 1000

No.	Name.	CLASS.	DATE.
346,594	Lord, G. W	Telephones, mechanical	Aug. 3, 1886
356,594	Lord, G. W	do	Jan. 25, 1887
359,215	Lord, G. W	do	Mar. 8, 1887
359,216	Lord, G. W Lord, G. W	do	Mar. 8, 1887
359,217 359,218	Lord, G. W	do	Mar. 8, 1887 Mar. 8, 1887
361,302	Lord, G. W	do	Apr. 19, 1887
362,639	Ludlow, W. I	Batteries, secondary	May 10, 1887
362,640	Ludlow, W. I	D the in-	May 10, 1887
346,053 348,134	Lugo, O	Batteries, galvanic Telephones, magnetic	July 20, 1886 Aug. 24, 1886
362,847	Lngo, O	Batteries, galvanic	May 10, 1887
352,472	Lüngen, A	Bells	Nov. 9, 1886
352,473	Lüngen, A	Igniting devices	Nov. 9, 1886
352,474	Lüngen, A	Telephones, switches	
353,263 352,625	Lyman, D. and Wheeler, M.		
358,864	Lyon, F. G.		Mar. 8, 1887
344,843	Macdonald, R	Conductors, underground	July 6, 1886
361,276	MacFarlane, J		
359,619 346,930	Macraedy, R. A.	Galvanometers Keys	Mar. 22, 1887 Aug. 10, 1886
352,700		Railway signals	Nov. 16, 1886
345,245	Mahnken, H	Telegraphy, printing	July 6, 1886
364,271	Maiche, L	Telegraphy, automatic	June 7, 1887
359,934 361,770	Main, W	Batteries, secondary	Apr. 26, 1887
362,099		Telephones, details	May 3, 1887
362,100	Maloney, J. A	do	
354,919		Circuit-closers	Dec. 28, 1886
359,085 350,312	Mansfield, G. W	Separators	Mar. 8, 1887 Oct. 5, 1886
353,797	Marshall, J. H	Batteries, secondary, applications	Dec. 7, 1886
349,312	Marshall, W	Telephones, magnetic	Sept. 21, 1886
360,968	Martin, M	Telegraphy, fire	Apr. 12, 1887
361,829 358,866		Motors———————————————————————————————————	
347,120	Mather, R. H	Rheostats	Ang. 10, 1886
351,388	Mather, R. H	Galvanometers	Oct. 26, 1886
353,151	Mather, R. H	Magneto-electric	Nov. 23, 1886
354,606 359,165	Mather, K. H	Regulators	Dec. 21, 1886 Mar. 8, 1887
349,945		Telegraphy, quadruplex	Sept. 28, 1886
364,031	Maxwell, W	Lights, filaments and carbons	May 31, 1887
348,227		Alarus	
359,799 351,191	Mayrholer, C. A	Clocks	Mar. 22, 1887
351,192	McCrackeu, E. D	do	Oct. 19, 1886
351,193	McCracken, E. D	Conductors, underground	Oct. 19, 1886
350,634	McCullough, L. H	Telegraphy, fire	Oct. 12, 1886
359,221 353,694		Lights, are, gravity feed, frictional	
357,682	McDonough, J. W. and Eldred, H. H	Telephones, switches	Feb. 15, 1887
363,250	McElroy, W. J. and Nicholson, J. D.	Locomotion	May 17, 1887
364,721	McEvoy, E	Cut-outs, thermal	June 14, 1887
349,893 348,406	McGrady J. and Sloane G. H	Conductors	Sept. 28, 1886
347,625	McIntire, C	Connectors	Aug. 17, 1886
355,189	McLaughlin, J. F.	Telephones, systems	Dec. 28, 1886
355,190		I constitution	
359,540 359,805		Locomotion	
363,158	McLaughlin, J. F	Telegraphy, dial	May 17, 1887
347,628	McQueen, F. J	Railway signals	Aug. 17, 1886
358,161	Meyay, W	Alarms Talanhanes supports	Feb. 22, 1887
351,389 349,947	Mehren, J. F	Telephones, systems	Sept. 28, 1886
357,726	Mehren, J. F	do	Feb. 15, 1887
359,575	Mehren, J. F. and Carroll, W	do	Mar. 15, 1887
350,381	Meisenheimer, A	Thermostats	Oct. 5, 1886
364,429 359,876	Mejer, G. E.	Clocks Batteries, secondary	June 7, 1887 Mar 99 1887
359,877	Meserole, A. V	do	Mar. 22, 1887
364,660	Meserole, A. V	Batteries, galvanic	June 14, 1887
353,367	Meston, A. W	Regulators	Nov. 30, 1886
355,548 354,838	Meyer, A	Telegraphy, fireApplications, general	Dec 21 1886
094,000	Discharce, Mr. M. and Michaele, A	applications, general	1, 1000

No.	Name.	Class.	DATE.
358,053	Michales, M. A. and Michaels, A	Applications, general	Feb. 22, 1887
354,923	Mindeleff, D	Separators	Dec. 28, 1886
352,342	Mingle, G. W. and Brown, W. T	Cut-outs, thermal	Nov. 9, 1886
362,584	Misell, D		May 10, 1887
351,933	Moffatt, J. M. and Blakeney, E.	Telegraphy, quadruplexLights, systems and appliances	Nov. 2, 1886
348,407 352,771	Morehouse, H. G		Aug. 31, 1886 Nov. 16, 1886
350,548	Morley, E. A	Thermostats	Oct. 12, 1886
365,089	Morrison, A. E	do	June 21, 1887
354,169	Morton, W. J.	Telephones, magnetic	Dec. 14, 1886
352,708	Moses, O. A	Batteries, secondary	Nov. 16, 1886
361,020	Mosher, S. E		Apr. 12, 1887
346,938	Muenchinger, G. A	ThermostatsConductors, underground	Aug. 10, 1886 Sept. 7, 1886
348,572 356,151	Munsie, J. F	do	Jan. 18, 1887
356,152	Munsie, J. F	do	Jan. 18, 1887
356,153	Munsie, J. F	do	Jan. 18, 1887
355,655	Munson, A. J		Jan. 4, 1887
352,143	Munson, J. E	Telegraphy, printing	Nov. 9, 1886
346,215	Murray, J. H	Medical and surgical, body-wear	July 27, 1886
347,952 359,622	Murray, P., jr	Lights, systems and appliances	Aug. 24, 1886 Mar. 22, 1887
347,823	Neyraud, J. B.	Batteries, galvanic	Aug. 24, 1886
360,040	Nichols, G. P. and Coombs, M., jr	Lights, systems and appliances	Mar. 29, 1887
347,634	Nicholson, H. C	Bells	Aug. 17, 1886
356,418	Nickum, G. S.	Transmitters	Jan. 18, 1887
346,217	Noble, C. B	Lights, are	July 27, 1886
362,852	Noble, C. M.	Lights, arc, positive feed Telegraphy, fire	May 10, 1887 Mar. 22, 1887
359,686 359,687	Voyes P. I	do	Mar. 22, 1887 Mar. 22, 1887
359.688	Noves, B. J	do	Mar. 22, 1887
359,689	Noves, B. J		Mar. 22, 1887
347,635	O'Brien, J	Insulators	
362,652	O'Connell, J. J	Telephones, systems	May 10, 1887
354,434	O'Keenan, C. E		Dec. 14, 1886
361.968	Olsen, J. L. W	Applications, tools and machines	Apr. 26, 1887 June 14, 1887
365,018 356,496	Otis, N. P	Applications, tools and machines	Jan. 25, 1887
358.691	Page, R. C. and Soden, F. H	Valve-controllers	Mar. 1, 1887
356,008	Paige, A. E	Cut-outs, electro-magnetic	Jan. 11, 1887
355,024	Paine, H. M.	Motors	Dec. 28, 1886
363,669	Paine, H. M.	do	May 24, 1887
348,045 354,209	Painter, G. E	Annunciators	
353,755	Palmer, N. F.	Telephones, electric	
358,939	Palmer, N. F.	Telegraphy, circuits and systems	Mar. 8, 1887
358,940	Palmer, N. F	Telephones, electric	Mar. 8, 1887
358,941	Palmer, N. F	do	Mar. 8, 1887
345,720	Parcelle, A. L.	Motors	
345,721	Parcelle, A. L.	Telegraphy, multiplex	July 20, 1886
360,903 348,636	Park, H. S	Clocks ————————————————————————————————————	Sept. 7, 1886
349,738	Park, H. S		
351,650	Park, H. S		
353,880	Park, H. S	do	
353,269	Parker, T. H. and Geary, J		Nov. 23, 1886
362,310	Parsons, H. W	Dental instruments	May 3, 1887
347,440 353,757	Partz, A. F. W		Dec. 7 1886
362,531	Partz, A. F. W	do	May 10, 1887
359,940	Patee, T. H. and Lawshe, S. R	Lightning-rods	Mar. 22, 1887
357,687	Patterson, C. A	Telephoues, systems	Feb. 15, 1887
346,414	Patterson, W. R	Conductors	July 27, 1886
346,942	Patterson, W. R	Conductors, underground	
352,486 356,156	Patterson, W. R.		Jan. 18, 1887
356,206	Patterson, W. R		Jan. 18, 1887
356,207	Patterson, W. R.		Jan. 18, 1887
363,909	Pauthonier, C		May 31, 1887
361,319	Paxson, 1		Apr. 19, 1887
348,771	Payne, C. Q		
356,850	Peachey, J. D.	Annunciators	Feb. 1, 1887 Mar. 1, 1887
358,694 356,261	Pearce, J. E.		Jan. 18, 1887
		Dateorico, Sarranto	2 2000
		Conductors	Sept. 14, 1886
348,994 363,079 359,812	Pearce, T. J. and Beardsley, M. W.——————————————————————————————————	Valve-controllers	May 17, 1887

No.	Name.	CLASS.	Date.
359,738	Pennock, G. B.	Conductors, underground	Mar. 22, 1887
348,048	Perkins, C. G.	Cut-outs, thermal	Aug. 24, 1886
348,049	Perkins, C. G	Lights, incandescent	Aug. 24, 1886
349,516 349,739	Perkins, C. G	Lights, systems and appliances	Sept. 21, 1886 Sept. 28, 1886
349,809	Perkins, C. G.	Conductors, underground	Sept. 28, 1886
360,244	Perkins, C. G.	Lights, sockets and keys	Mar. 29, 1887
361,712	Perkins, C. G.	Regulators	Apr. 26, 1887
361,713	Perkins, C. G	Cut-outs, thermal	Apr. 26, 1887
362,108 358,464	Perkins, C. G Perreur-Lloyd, J. B	Conductors Batteries, galvanic	May 3, 1887 Mar. 1, 1887
347,374	Perrin, T. J.	Telephones, magnetic	Aug. 17, 1886
348,578	Perrin, T. J	Telephones, systems	Sept. 7, 1886
348,579	Perrin, T. J	do	
350,388 356,727	Perry, N. W	Alarms Batteries, galvanic	
345,539	Pfannkuche A	Lights, filaments and carbons	July 13, 1886
348,927	Pfannkuche, G	Lights, are	Sept. 7, 1886
344,983	Phelps, A. M.	Telephones, magnetic	July 6, 1886
351,524	Phelps, L. J		
351,525 355,468	Pholog I I	do	Oct. 26, 1886 Jan. 4, 1887
355,469	Phelps, L. J	do	Jan. 4, 1887
355,470	Phelps, L. J	do	Jan. 4, 1887
362,312	Pieper, H., fils	Lights, arc, positive feed	May 3, 1887
355,662 349,600	Pike, D. E	Telegraphy, printing	Jan. 4, 1887
359,982	Plume, F. C.	Batteries, galvanic	Sept. 21, 1886 Mar. 22, 1887
359,690	Pollak, K	Batteries, galvanic	Mar. 22, 1887
362,902	Pond, C. H	Clocks	May 10, 1887
348,139		Telephones, systems	Aug. 24, 1886
350,445 359,739	Powers J A	Heaters	Oct. 5, 1886 Mar. 22, 1887
360,538	Powers, J. A	do	Apr. 5, 1887
354,342	Pratt, C. C	Lightning-rods	Dec. 14, 1886
355,838	Pratt, H. P. and McPherson, L. O	Telephones, electric	Jan. 11, 1887
357,627 348,473	Present, G. B., jr	Batteries, secondary, applications Thermostats	
354,932		Thermostatsdo	Aug. 31, 1886 Dec. 28, 1886
352,571		Railway signals	Nov. 16, 1886
346,561	Pyle, G. C	Lights, are	Aug. 3, 1886
353,643	Pyle, G. C	Lights, arc, gravity feed, frictional	Nov. 30, 1886
356,786 356,787	Pyle H L	Lights, arc, positive feed Lights, systems and appliances	Feb. 1, 1887 Feb. 1, 1887
356,788	Pyle, II. L	Lights, are	Feb. 1, 1887
355,412	Quinby, W. C	Batteries, galvanic	Jan. 4, 1887
350,154	Radford, B. F	Magneto-electric	
357,967 360,362	Radford C M	Telephones, mechanicaldodo	Feb. 15, 1887 Mar. 29, 1887
364,372		Applications, general	
346,862	Ramel, A. and Dean, W. W.	Clocks	Aug. 3, 1886
346,863	Ramel, A. and Dean, W. W.	do	Aug. 3, 1886
365,023 349,605	Ramel, A. and Dean, W. W.	Indicators	June 14, 1887
353,003		Motors	Sept. 21, 1886 Nov. 23, 1886
359,691	Reed, H. T	Lights, systems and appliances	Mar. 22, 1887
346,314	Reeder, E. A.	Telegraphy, fire	July 27, 1886
352,203	Reichling, R	Alarms	Nov. 9, 1886
345,542 345,860	Reinmann, A. L	Lights, sockets and keys	July 13, 1886 July 20, 1886
353,158	Reinmann, A. L	Lights, filaments and carbons	Nov. 23, 1886
355,714	Reinmann, A. L	do	Jan. 11, 1887
347,830	Renehan, J. J	Lights, systems and appliances	Aug. 24, 1886
361,778 361,779	Reynolds, G. H.	Applications, tools and machines	Apr. 26, 1887
361,780		do	Apr. 26, 1887 Apr. 26, 1887
354,233	Rice, E. W., jr	Lights, systems and appliances	Dec. 14, 1886
364,133	Richardson, J. D	Telephones, systems	May 31, 1887
356,792	Ricketson, J. C	Indicators	Feb. 1, 1887
352,265 356,963		Locomotion Car-brakes	
356,964		car-orakes	
347,642		Systems of distribution	
363,851	Ritchie, J	Induction-coils	May 31, 1887
361,782		Lights, systems and appliances	
350,772 352,070	Robertson, A. R.	Telephones, electricApplications, tools and machines	Nov. 2 1886
1010	Activoticity (), 10	applications, tools and machines	2, 1000

No.	Name.	CLASS.	DATE.
350,320	Robertson, J. H	Telegraphy, automatic	Oct. 5, 1886
353,592	Robertson, J. H	do	Nov. 30, 1886
353,593	Robertson, J. H	do	Nov. 30, 1886
353.594	Robertson, J. H	do	Nov. 30, 1886
357,038 357,039	Robertson, J. H	do	Feb. 1, 1887 Feb. 1, 1887
346,688	Robinson, W. L	Conductors, underground	Aug. 3, 1886
345,178	Rockwell, R. N.	Medical and surgical, body-wear	July 6, 1886
350,843	Rogers, C	InsulatorsTelegraphy, fire, alarms and extinguishers	Oct. 12, 1886
364,299	Rogers, C. D	Telegraphy, fire, alarms and extinguishers	June 7, 1887
358,753	Rogers, J. H	Motors	Mar. 1, 1887 Dec. 14, 1886
354,241 346,865	Rose, P. L. and Rein, G	Telephones, systems	Aug. 3, 1886
346,866	Rose, P. L. and Rein, G	do	Aug. 3, 1886
357,337	Rosenblatt, S	Telephones, supports	Feb. 8, 1887
362,115	Rosenblatt, S	do	
345,452 350,945	Roth, C. W Roth, C. W	Applications, general————————————————————————————————————	
346,609	Rousseau, D	Annunciators	
352,154	Rousseau, D.	Magnetic locks and bolts	Nov. 9, 1886
357,789	Rutherford, R. C.	Relays and sounders	
354,350 350 215	Samuel, E.————————————————————————————————————	Locomotion Telephones, electric	Dec. 14, 1886 Oct. 5, 1886
350,215 354,352	Sass, V. and Friederich, K	Batteries, secondary	
359,816	Sawyer, W. H	Conductors, underground	Mar. 22, 1887
352,006	Schaefer, F	Lights, sockets and keys	Nov. 2, 1886
352,007	Schaefer, F	Conductors, underground	Nov. 2, 1886
361,086 357,416	Scheidl, CSchleicher, G	Alarms, burglar	Apr. 12, 1887 Feb. 8, 1887
362,399	Schlotterbeck, A. G	Lights, systems and appliances	May 3, 1887
353,164	Schmid, A	Magneto-electric	Nov. 23, 1886
361,896	Schmid, A	Telephones magnetic	Apr. 26, 1887 Dec. 28, 1886
355,032 364,605	Schoenkloth, H. A	Telephones, magnetic Lightning-rods	June 7, 1887
347,013	Scola, J. P. A	Applications, general	
350,469	Scott, D. B	Telegraphy, printing	Oct. 5, 1886
365,705	Scott, G. B	Poilway signals	
360,175 $345,325$	Scribner, C. E	Railway signals	July 13, 1886
345,326	Scribner, C. E	do	
356,211	Scribner, C. E	Lights, arc, gravity feed, frictional	
356,425 $356,426$	Scribner, C. E Scribner, C. E	Telephones, systemsdodo	
356,427	Scribner, C. E	do	
357,538	Scribner, C. E	Telephones, switch-boards	Feb. 8, 1887
346,505	Sears, J. W.	Valve-controllers	Aug. 3, 1886
347,068 347,069	Sedgwick, F	Magnetic locks and bolts	Aug. 10, 1886 Aug. 10, 1886
347,070	Sedgwick, F	do	Aug. 10, 1886
347,071	Sedgwick, F	do	Aug. 10, 1886
363,550	Sedgwick, F	Applications, general	May 24, 1887
350,160 $359,328$	See, J. W Seel, C	Telephones, systems Lights, incandescent	
357,539	Seely, J. A	Telephones, systems	Feb. 8, 1887
357,540	Seely, J. A	do	Feb. 8, 1887
351,209	Seiler, P	Telephones, magnetic	
355,791 364,444	Seiler, P	Annunciatorsdo	
358,890	Selden, C	Circuits and systems	Mar. 8, 1887
361,089	Selden, C	Car-brakes	Apr. 12, 1887
361,090	Selden, C	Circuits and greatens	
363,969 365,103	Selden, C	Circuits and systems	June 21, 1887
361,455	Settle, M		Apr. 19, 1887
365,639	Shaffer, C. H	Telegraphy, fire, alarms and extinguishers	June 28, 1887
347,964	Shallenberger, O. B	Regulatorsdodo	Aug. 24, 1886 Feb. 8, 1887
357,293 359,101	Shallenberger, O. B	do	
352,577	Shaver, G. F	Telephones, mechanical	Nov. 16, 1886
354,942	Shaver, G. F	Telephones, systems	Dec. 28, 1886
353,598	Shaw, E	Lights, filaments and carbons	Nov. 30, 1886
353,086 $359,894$	Shaw, E. S.——————————————————————————————————	Magneto-electric	Nov. 23, 1886 Mar. 22, 1887
362,322	Sheehy, R. J	Meters	
362,322 347,204	Short, S. H	Regulators	Aug. 10, 1886
356,667	Short, S. H	Magneto-electric	Jan. 25, 1887
357,865	Short, S. H.	Railway signals	Teb. 19, 1807

No.	Name.	Class.	DATE.
348,476	Short, S. H. and Nesmith, J. W	Locomotion	Aug. 31, 1886
348,477		do	Aug. 31, 1886
362,323	Short, S. H. and Nesmith, J. W	do	May 3, 1887
353,715	Shryock, J. W	Telegraphy, transmitters	
355,793 360,823	Siebel, J. E Singer, W. F	Alarms	
360,824	Singer, W. F	Telegraphy, fire	
354,257	Slattery, M. M. M	Rheostats	Dec. 14, 1886
354,258	Slattery, M. M. M	Lights, systems and appliances	Dec. 14, 1886
358,415	Slattery, M. M. M	Induction-coils	Feb. 22, 1887
358,492	Slattery, M. M. M	Lights, incandescent	
358,493	Slattery, M. M. M.	Regulators	
358,793 356,795	Slattery, M. M. M. Slattery, M. M. M.	Induction-coils Lights, incandescent	
356,796	Slattery, M. M. M	Batteries, galvanic	
355,843	Sloan, E. C	Conductors, lead-covered	Jan. 11, 1887
355,844	Sloan, E. C	do	Jan. 11, 1887
351,075	Slocum, E. L	Telegraphy, fire	Oct. 19, 1886
358,896	Smith, A. B	Anuunciators	
349,533	Smith, A. T	Igniting devices	Sept. 21, 1886
355,226 353,827	Smith, D. J. and Sinclair, D	Telephones, systems	Dec. 28, 1886
365,351	Smith, H. J	Magneto-electric, hand-machines Lights, sockets and keys	June 21, 1886
361,901	Smith, J. E	Telegraphy, fire	
348,792	Smith, M. H	Locomotion	
356,605	Smith, M. M. and Jones, F. P	Alarms	
345,998	Smith, R. F	Applications, tools and machines	July 20, 1886
347,656	Smith, R. F	do	
346,237	Smith, R. T	Applications, general	July 27, 1886
360,252 353,984	Smith, W. C Smith, W. F	Telegraphy, fire	Mar. 29, 1887
365,353	Smith, W. R. and Washburn, A. L		
360,179	Solano, R	Car-brakes	Mar. 29, 1887
360,925	Solano, R	Conductors	Apr. 12, 1887
353,511	Sorley, C	Batteries, secondary	Nov. 30, 1886
346,509	Spalding, H. C.	Conductors, anti-inductive	Aug. 3, 1886
346,510 345,084	Spalding, H. C	Telephones, electric	Aug. 3, 1886
345,085	Spaulding, E. S.——————————————————————————————————	do	July 6, 1886 July 6, 1886
347,528	Speer, A		Aug. 17, 1886
353,986	Sperry, E. A	Regulators	Dec. 7, 1886
353,987	Sperry, E. A	Motors	Dec. 7, 1886
353,988	Sperry, E. A	Regulators	
353,989	Sperry, E. A	Magneto-electric	Dec. 7, 1886
353,990 354,945	Sperry, E. A	RegulatorsMagneto-electric	Dec. 7, 1886
354,946	Sperry, E. A	do	Dec. 28, 1886
360,060	Sperry, E. A	Car-brakes	
361,843	Sperry, E. A	Transmission of power	
361,844	Sperry, E. A	Cut-outs, electro-magnetic	
353,829	Sprague, F. J	Locomotion	
363,304	Stanley, L. T.	Induction-coils	
348,501 349,611	Stanley W., jr	Telephones, electric	
349,612	Stanley, W., jr	do	
349,613	Stanley, W., jr	Lights, systems and appliances	
349,614	Stanley, W., jr	do	Sept. 21, 1886
349,615	Stanley, W., jr	Magneto-electric	
349,616	Stanley, W., jr	Induction-coils	
349,617 353,603	Stanley, W., jr	Cut outs masheries	Sept. 21, 1886
363,559	Stanley, W., jrStanley, W., jr	Cut-outs, mechanical Lights, sockets and keys	Nov. 30, 1886 May 24, 1887
347,258	Starr, E. T	Batteries, secondary	Aug. 10, 1886
347,259	Starr, E. T	Batteries, galvanic	Aug. 10, 1886
357,873	Starr, E. T	Batteries, secondary, applications	Feb. 15, 1887
359,900	Starr, E. T	do	Mar. 22, 1887
359,901	Starr, E. T.	do	Mar. 22, 1887
362,859 365,493	Steeber M., jr	Rheostats	May 10, 1887
359,902	Stecher, M	Applications, general	June 28, 1887 Mar. 22, 1887
354,814	Steiner, J	Keys	Dec. 21, 1886
354,815	Steiner, J	Relays and sounders	Dec. 21, 1886
351,408	Stern, P. K	Alarms, burglar	Oct. 26, 1886
	Ct. XXZ A	Lights, systems and appliances	July 27, 1886
346,388	Stern, W. A		July 27, 1600
	Stern, W. A. Stern, W. A. Sternberg, G. M	Alarms	Mar. 8, 1887 Jan. 11, 1887

355,894 Sternberg, G. M. and Lehmann, A. A. A. A. A. A. A. A.				
355,955 Sternberg, G. M. and Lehmann, A. A.	No.	Name.	Class.	Date.
355,895 Sternberg, G. M. and Lehmann, A. A	355 894	Sternberg, G. M.	Thermostats	Jan. 11, 1887
346,957 Stevens, W. L. Meters Aug. 1 A		Sternberg, G. M. and Lehmann, A. A		Jan. 11, 1887
Solicitable Stewart, G. W. Relays and sounders Oct. 1		Stevens, W. L		Aug. 10, 1886
361,730 Stewart, S. B.				Jan. 11, 1887
361,131 Stiegelmaire, W. H.		Stewart, G. W		Oct. 12, 1886
351,131 Stiegelmaier, W. H. Thermostats Oct. 1				Apr. 26, 1887
351,413 Stites, G		Stewart, S. B.		Apr. 26, 1887
355,120 Stockwell, J. O				Oct. 19, 1886 Nov. 2, 1886
S57,143 Stockwell, J. O				Jan. 4, 1887
Sail.pri				Feb. 1, 1887
355, 198 Stone, L. B.				Oct. 19, 1886
S56,950 Stonitsch, J. and Sweet, W. F.		Stone, L. B		Oct. 26, 1886
S55,952 Stut, J. C. H.	356,805	Stonitsch, J. and Sweet, W. F	Indicators	Feb. 1, 1887
S55,178 Sutton, G. D. Conductors, underground Jan. 1				Dec. 28, 1886
S35,98 Sutton, G. D. Conductors, underground Jan. 1			Telephones, electric	Jan. 11, 1887
359,984 Swain, C. R.		Summers, L. P		Feb. 22, 1887
346,515 Sweeny, R. G		Swein C P		Jan. 11, 1887
346,515 Sweeny, R. G		Swan A		Mar. 22, 1887 May 3, 1887
349,539				Aug. 3, 1886
S59,188 Tabony, J. H.				Sept. 21, 1886
S80,626			Telephones, electric	Mar. 8, 1887
Section		Tabony, J. H.		Mar. 22, 1887
Signature Sign				Apr. 5, 1887
Sas, 182 Tatham, J		Tasker, W. H. and Jones, T. J	Batteries, galvanic	Feb. 15, 1887
Taussig S				Feb. 22, 1887
Sab Sab Tausig S				May 17, 1887 Mar. 22, 1887
Tesla, N				Mar. 22, 1887
Tesla N	350,954			Oct. 19, 1886
362,192 Thaxter, G. E	359,748			Mar. 22, 1887
353,766	351,222	Thackara, S	Clocks	Oct. 19, 1886
339,825	362,192	Thaxter, G. E		May 3, 1887
365,495		Thompson, A. and Ritchie, R. O		Dec. 7, 1886
345,334				Mar. 22, 1887
345,335				June 28, 1887
347,140				July 13, 1886 July 13, 1886
347,140				July 13, 1886
347,141 Thomson, E				Aug. 10, 1886
349,912 Thomson, E		Thomson, E		Aug. 10, 1886
350,955				Aug. 10, 1886
350,956		Thomson, E		Sept. 28, 1886
350,957				Oct. 19, 1886
350,958				Oct. 19, 1886 Oct. 19, 1886
Thomson, E				Oct. 19, 1886
353,180				Nov. 23, 1886
Thomson, E			do	Nov. 23, 1886
Thomson, E	354,272	Thomson, E	Batteries, secondary	Dec. 14, 1886
356,902			Regulators	Dec. 14, 1886
356,903				Dec. 14, 1886
360,122	356,002			Feb. 1, 1887
Thomson, E				Feb. 1, 1887 Mar. 29, 1887
Thomson, E				Mar. 29, 1887
360,125				Mar. 29, 1887
363,184	360,125		Systems of distribution	Mar. 29, 1887
Motors		Thomson, E	Cut-outs, mechanical	May 17, 1887
363,186				May 17, 1887
365,553				May 17, 1887
365,414 Thomson, F Lights, systems and appliances June 2 348,799 Thone, F Lights, arc Sept. 363,562 Tichenor, A. C Batteries, galvanic May 2 352,374 Tilden, J. A Steering and propulsion Nov.				May 17, 1887 June 28, 1887
348,799 Thone, F Lights, arc Sept. 363,562 Tichenor, A. C Batteries, galvanic May 2 352,374 Tilden, J. A Steering and propulsion Nov.		Thomson F		
363,562 Tichenor, A. C. Batteries, galvanic May 2 352,374 Tilden, J. A. Steering and propulsion Nov.				Sept. 7, 1886
352,374 Tilden, J. A. Steering and propulsion	363,562			May 24, 1887
	352,374			Nov. 9, 1886
	347,075	Timmis, I. A. and Forbes, G	Car-brakes	Aug. 10, 1886
	359,040			Mar. 8, 1887
	349,767	Torrey, A. and Casey, D. J.	Recorders	Sept. 28, 1886
352,590 Toulmin, M Railway signals Nov. 1 Alarms Mar. 1	350 591			Nov. 16, 1886 Mar. 15, 1887
	364 975	Townley I. P and Washburn W I		June 14, 1887
				Aug. 31, 1886
348,430 Townsend, L Telephones, electric Aug. 3				Aug. 31, 1886
	350,024			

No.	NAME.	CLASS.	DATE.
358,002	Trauernicht, T. H	Applications, general	Feb. 15, 1887
360,254	Tregoning, J	Lights, arc, gravity feed, gear	Mar. 29, 1887
344,882	Trippe, S. L.	Batteries, secondary	July 6, 1886
348,482	Trippe, S. L.	do	Aug. 31, 1886
350,449	Tucker, C. A	Annunciators	Oct. 5, 1886
350,450	Tucker, C. A	Alarms	Oct. 5, 1886
350,451 = 353,274	Tucker, C. A. and Huebel, O. H.	Telegraphy, fireBells	Oct. 5, 1886 Nov. 23, 1886
353,273	Tucker, C. A. and Markland, W. H.	Dellsdo	Nov. 23, 1886
346,962	Turnbull, W. C	Telephones, magnetic	Aug. 10, 1886
348,936	Turnbull, W. C.	Telephones, switches	Sept. 7, 1886
346,876	Ullmau, M	Annunciators	Aug. 3, 1886
358,511	Upton, E. W	Thermostats	Mar. 1, 1887
357,646	Upward, A. R. and Pridham, C. W	Batteries, galvanic	Feb. 15, 1887
357,050	Vail, J. H	Lightning-rods	Feb. 1, 1887
363,702	Vance, S. B. H	Lights, systems and appliances	May 24, 1887
347,399	Vance, T. C. II	Indicators	
362,128	Vau Choate, S. F	Lights, incandescent	May 3, 1887
346,963	Van Depoele, C. J	Locomotion	
347,901	Van Depoele, C. J	V-40	
347,902	Van Depoele, C. J		Aug. 24, 1886
347,903	Van Depoele, C. J		Aug. 24, 1886
$347,904 \\ 347,905$	Van Depoele, C. J		
348,360	Van Depoele, C. J		
352,074	Van Depoele, C. J		
352,167	Van Depoele, C. J		
353,333	Van Depoele, C. J		
353,334	Van Depoele, C. J		
353,335	Van Depoele, C. J	Locomotion	Nov. 30, 1886
353,653	Van Depoelc, C. J	Conductors	Nov. 30, 1886
$358,\!512$	Van Depoelc, C. J		
362,798	Van Depoele, C. J	Motors	May 10, 1887
357,647	Vander Weyde, P. H	Medical and surgical, body-wear	Feb. 15, 1887
345,008	Van Gestel, J. T.	Lights, sockets and keys	July 6, 1886
358,092	Vau Gestel, J. T	Batteries, secondary	Feb. 22, 1887
359,371	Vau Nort, S. P	Railway signals	Mar. 15, 1887
360,492 - 361,734	Van Rysselberghe, F	Telegraphy, circuits and systems	Apr. 5, 1887 Apr. 26, 1887
363,188	Van Rysselberghe, F	do	May 17, 1887
362,682	Van Sands, H	Insulators	May 10, 1887
358,133	Vivó y Grælls, F	Regulators	Feb. 22, 1887
354,818	Voelker, W. L	Telephones, details	Dec. 21, 1886
356,019	Voelker, W. L.	Lights, incaudescent	Jan. 11, 1887
356,020	Voelker, W. L.		Jan. 11, 1887
347,752	Vogel, W	Railway signals	Aug. 17, 1886
347,753	Vogel, W		Aug. 17, 1886
350,025	Vogler, R	Motors	Sept. 28, 1886
353,649	Waddell, M		Nov. 30, 1886
355,734 360,068	Waite, H. E		Jan. 11, 1887 Mar. 29, 1887
360,934	Waite, H. E		Apr. 12, 1887
361,794	Walker, S. F		Apr. 26, 1887
353,337	Wallace, T. and En Holm, O. A		Nov. 30, 1886
360,127	Wallis, F. B		Mar. 29, 1887
351,229	Walter, H	Motors	Oct. 19, 1886
351,544	Walter, H. E		Oct. 26, 1886
360,258	Walter, H. E. and Batchelor, C		Mar. 29, 1887
360,259	Walter, H. E. and Batchelor, C	do	Mar. 29, 1887
354,847	Walter, W. C	Cut-outs, thermal	Dec. 21, 1886
364,559	Wamsley, W. F		June 7, 1887
364,558	Wamsley, W. F. and McIntosh, T		June 7, 1887
358,309		Lights, systems and appliances	Feb. 22, 1887
$363,440 \\ 346,965$	Warner, C. D.		May 24, 1887
356,859	Warner, E. P.		Aug. 10, 1886 Feb. 1, 1887
361,973	Warner, E. P	Telephones, systems Magneto-electric	Apr. 26, 1887
359,414	Wasserman, G	Applications, tools and machines	Mar. 15, 1887
345,937	Waterhouse, A. G.	Lights, are	July 20, 1886
346,183	Waters, E. G. and Sweeny, R. G	Telephones, switch-boards	July 27, 1886
355,423	Watkins, F. C	Connectors	Jan. 4, 1887
355,424	Watkins, F. C	Telephones, magnetic	Jan. 4, 1887
355,425	Watkins, F. C	Telephones, switch-boards	Jan. 4, 1887
355,426	Watkins, F. C	Telephones, electric	
357,051	Watkins, F. C	Telephones, systems	Feb. 1, 1887
		Annunciators	Feb. 1, 1887
357,052 357,053	Watkins, F. C	Telephones, systems	Feb. 1, 1007

No.	Name.	CLASS.	DATE.	
357,054	Watkins, F. C	Telephones, electric	Feb 1 1887	
351,233	Watkins, H. W	Medical and surgical, body-wear		
348,077	Watson, T. A	Telephones, magnetic	Aug. 24, 1886	
361,797	Weaver, S	Telegraphy, circuits and systems	Apr. 26, 1887	
353,184 357,055	Wehrle, J. H	Telephones, switch-boards		
357,056	Weil, L	Valve-controllersdodo		
355,363	Weinhaus, T. H	Telephones, mechanical	Jan. 4, 1887	
350,177	Weisgerber, W. F. and Himmer, I. C	Clocks Recorders	Oct. 5, 1886	
348,437	Weiss, C. W.	Recorders	Aug. 31, 1886	
357,881 348,603	Wells, E. D Wessels, E. J	Railway signalsLights, systems and appliances	Sept. 7 1887	
347,216	Westcott, C. H. and F	Telegraphy, fire, alarms and extinguishers	Ang. 10, 1886	
362,801	Westcott, F	Lightning-rods		
352,725	Westinghouse, G., jr	Relays and sounders		
357,109	Westinghouse, G., jr	Railway signalsdo		
357,296 358,518	Westinghouse, G., jr	Connectors		
358,519	Westinghouse, G., jr	Railway signals		
358,520	Westinghouse, G., jr	Valve-controllers	Mar. 1, 1887	
358,521	Westinghouse, G., jr	do		
358,713	Westinghouse G in	Applications, tools and machines	Mar. 1, 1887	
359,303 360,638	Westinghouse, G., jr	Railway signals	Apr. 5, 1887	
357,295	Westinghouse, G., jr., and Schmid, A	Magneto-electric		
348,646	Weston, E	Cut-outs, thermal		
348,647	Weston, E	Lights, sockets and keys		
348,648 348,649	Weston, E	MetersLights, systems and appliances	Sept. 7, 1886 Sept. 7, 1886	
359,752	Wetmore, J. A	Applications, tools and machines.	Mar. 22, 1887	
346,250	Wheaton, F	Conductors, underground	July 27, 1886	
348,707	Wheeler, A. D	Telegraphy, fire		
359,338 354,588	Wheeler, A. D	Recorders Magneto-electric	Mar. 15, 1887 Dec. 21, 1886	
358.314	Wheeler, S. S. and Curtis, C. G.	Batteries, galvanic	Feb. 22, 1887	
352,900 347,851	Wheless, M. and Darden, J. D.	Telephones, electric	Nov. 16, 1886	
347,851	White, J. E	Thermostats	Aug. 24, 1886	
346,970 350,648	Whitney, E. R	Cut-outs, thermal	Aug. 10, 1886 Oct. 12, 1886	
362,133	Whitney, E. R	Applications, general	May 3, 1887	
360,980	Whittier, T. P.	Alarms	Apr. 12, 1887	
350,279	Wickersham, C. H	Indicators		
350,790 362,409	Wicks, P. J	Railway signalsdodo		
361,663	Wiese, G. A	Lights, are, gravity feed, gear	Apr. 19, 1887	
345,561	Wightman, M. J.	Lights, systems and appliances	July 13, 1886	
348,876 348,875	Wightman, M. J.	Regulators Lights, incandesceut		
363,567	Wightman, M. J. and Lemp, H	Lightning-arresters		
363,568	Wightman, M. J. and Lemp, H.	Lights, sockets and keys	May 24, 1887	
365,159	Wightman, M. J. and Lemp, H	Cut-outs, mechanical	June 21, 1887	
358,910		Bells	Mar. 8, 1887	
355,491 $355,492$	Wiley, G. L	Conductorsdo		
355,493	Wiley, G. L			
358,317	Wiley, G. L.	Telephones, systems	Feb. 22, 1887	
361,737	Wilkins, G. A		Apr. 26, 1887	
348,708 350,515	Willets, J. P. and Crolius, E. R.—————Williams, B.————————————————————————————————————	Lights, systems and appliances	Sept. 7, 1886 Oct. 12, 1886	
354,290	Williams, B	do	Dec. 14, 1886	
358,095	Williams, B	do	Feb. 22, 1887	
353,393	Williams, T. D., Eitemiller, G. M. and Lu-	Railway signals	Nov. 30, 1886	
347,218	cock, J. S. Williamson, D	Lights, are	Aug. 10, 1886	
354,291	Williamson, D	Lights, systems and appliances	Dec. 14, 1886	
354,292	Williamson, D	Magneto-electric	Dec. 14, 1886	
355,738	Williamson, D	doTelephones, calls	Oat. 12 1887	
350,610 355,739	Willis, C. F			
352,596	Wilson, G. W			
346,971	Wilson, J	Insulators	Aug. 10, 1886	
346,972	Wilson, J	do	Aug. 10, 1886	
347,454 349,022	Wilson, J			
351,681	Wilson, J. C	Recorders	Oct. 26, 1886	
352,435	Wilson, J. C	Telegraphy, printing	Nov. 9, 1886	
362,135	Wilson, J. C	Electro-magnets	May 5, 1887	

No.	Name.	CLASS.	DATE.	
365,216 352,436 352,437 361,248 354,001 345,755 345,756 355,741 355,743 355,744 355,745 355,745 355,746 359,306 359,307 359,308 359,309 364,619 347,754 350,519 351,419 361,249 348,606 352,600 360,077 363,106 345,658 363,498 352,105 357,885	Winekler, E. and Heilmann, J. J. Winton, H. D. Winton, H. D. Winton, H. D. Winton, H. D. Wirsching, A. Wirt, C. Wirt, C. Witt, C. Wittenberg,	do Telephones, systems Recordersdo Bells Relays and sounders Batteries, galvanic Cut-outs, electro-magnetic Valve-controllers Applicatious, generaldo	Apr. 12, 1887 Dec. 7, 1886 July 20, 1886 July 20, 1886 Jan. 11, 1887 Mar. 15, 1887 Aug. 17, 1886 Oct. 12, 1886 Oct. 26, 1886 Apr. 12, 1886 Oct. 26, 1886 Apr. 12, 1887 Sept. 7, 1886 Nov. 16, 1886 Mar. 29, 1887 May 17, 1887 July 13, 1887 July 13, 1886 May 24, 1887 Nov. 2, 1886	
REISSUES.				
10,838 10,768 10,802 10,791 10,816 10,846	Curtiss, R. M	of 314,167.) Thermostats. (Re-issue of 331,406) Do. (Re-issue of 342,018)	May 31, 1887 Sept. 28, 1886 Jan. 25, 1887 Dec. 21, 1886 Mar. 8, 1887 June 21, 1887	

11303-250



